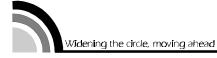
Commercial Approaches to New Product Development in Microfinance

Case Studies of Banco Solidario de **Ecuador and Cajas** Municipales de Arequipa, Peru



MICROENTERPRISE BEST PRACTICES

Development Alternatives, Inc., 7250 Woodmont Avenue, Suite 200, Bethesda, MD 20814 USA



Commercial Approaches to New Product Development in Microfinance:

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by

Monica Brand ACCION International

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PREFACE

This comparative analysis contains case studies of specific products¹ developed by two distinct, commercially oriented² microfinance institutions, Banco Solidario de Ecuador and Cajas Municipales de Ahorros y Créditos–Arequipa, Peru. More specifically, this deliverable will describe the new product characteristics—including terms, target market, and financial considerations—that these institutions have used to serve their customers and compete more effectively. In so doing, these case studies will examine the conditions—including customer needs, competition, regulatory environment, and internal issues—that motivated product innovation and how they shaped the terms and packaging. More important, this comparative analysis will evaluate the success of these products in helping the commercial microfinance institutions that developed them achieve their goals of being client driven and, thus, financially viable.³

For simplicity, new product development includes both financial services (like insurance) as well as tangible products (like credit cards).

² Commercially oriented microfinance institutions include conventional banks and other financial institutions that have entered the microfinance market seeking a profitable return; regulated, for-profit financial institutions dedicated to this market segments that have transformed from nongovernmental organizations; and other market-driven nongovernmental organizations.

This document does not cover the process of how these products were developed, but rather their existing characteristics. A subsequent, more process-oriented case study will "field test" the companion "Technical Notes on New Product Development," also prepared under the Microenterprise Best Practices Project, to document the process undertaken by institutions operating in the microenterprise market.

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INTRODUCTION AND HIGHLIGHTS

In a growing number of markets, the maturing microfinance sector is becoming more competitive and commercially oriented. In these markets, microfinance institutions have demonstrated that microentrepreneurs are lucrative customers worth wooing, and they are creating more client-centered operations. These microfinance institutions have changed both the scale and scope of their operations, searching for new markets and greater penetration by broadening the range of services offered. With profit in mind, these institutions have expanded their product lines to attract new, and retain existing, customers.

The commercialization of microfinance has come about because of increased competition, changes in financial regulation, and the increased flow of funds in markets where demand is strong and discriminating. In these markets, customers now have a choice of providers from which to access credit and other financial services, pressuring microfinance institutions to respond with a richer menu of offerings. The resulting products, which are new to the field of microfinance, reflect the market realities of more sophisticated microenterpreneurs, greater competition, increased organizational capacity, and more formalized lending environments.

The following comparative case studies examine the characteristics of specific products developed by two microfinance institutions, Banco Solidario de Ecuador (BSE) and Cajas Municipales de Ahorros y Créditos—Arequipa (CMA) in Peru. The case studies analyze:

- Internal and external conditions that gave rise to the development of new products;
- Product characteristics that reflect the needs of the market segment targeted; and
- Success of these institutions in designing effective products.

The specific products chosen fall into three categories:

- Standardized, high-margin products: pawn loans (BSE and CMA);
- Loans targeted to preferential or "premier" clients: *home equity loans* (BSE) and *parallel loans* (CMA);
- Loans targeted at specific market niches: *supplier-vendor loans* (BSE) and *agricultural loans* (CMA).

These products are *not* new to the world of finance. In fact, they are commonly offered by conventional financial institutions and informal money lenders. What is new about these products is their market-based application to the field of microfinance. In other words, these new offerings represent a shift from the supply-driven products typically offered by most microfinance institutions, which often have operated in monopoly environments. As such, these new products are presented as a "best practice" because of what they imply about the *institutions* offering them—i.e., a client-centered, market-driven approach—rather than the actual design of the product.

PARTICIPATING INSTITUTIONS

Although quite different in age and structure, the two institutions studied, Banco Solidario de Ecuador and Cajas Municipales de Ahorros y Créditos—Arequipa, Peru, take a commercial approach to microfinance and offer an array of products tailored to the needs of their target markets. Their commercial orientation and continued dedication to product development made them strong candidates for this study. A general overview of each institution's respective product offerings is provided in Table 1.

Table 1: Snapshot of Product Portfolio of Participating Institutions

	Type of Product (English name)	Date of Product Launch	No. of clients (6/98)	Outstanding (6/98) Portfolio (\$US 000)
Banco Solidario				1 = sucres 5,235.6
Crédito Individual	Individual loan	Sept. 1995	3,613	\$1,822.32
Olla de Oro	Pawn loan	June 1996	8,054	\$1,417.50
Crédito Solidario	Solidarity group loan	July 1996	3,866	\$656.46
Crédito Fiduciario	Home equity loan	Sept. 1997	265	\$793.60
Cuenta Solidaria	Supplier line of credit	Jan. 1998	717	\$249.83
TOTAL BSE			16,515	\$4,939.71
Cajas Municipales				1 = soles 2.9367
Crédito Prendario	Pawn loan	March 1986	14,200	\$1,042.36
Crédito de Micro/	Small and micro		19,800	
Pequeña Empresa	business loans	Dec. 1990		\$18,499.54
Crédito Personal	Personal loan	Oct. 1992	4,100	\$2,373.37
Crédito Paralelo*	Parallel loan	June 1995	N/A	N/A
Crédito Agricola	Agricultural loan	Nov. 1996	360	\$1,429.36
TOTAL CMA			38,460	\$23,344.63

^{*} The parallel credit is included among the small and micro business loan portfolio.

PRODUCTS ANALYZED

The three product categories⁴ for this study were pawn loans; credits designed for preferential or "premier" clients (in terms of either retaining good payers or targeting attractive segments); and niche market products. The products examined are labeled as "new" to the extent that they were developed to meet the needs of microentrepreneurs beyond traditional supply-driven, fixed-term, working capital financing. In other words, these products are new to the institutions and the respective markets they are trying to serve.

For each product examined, the analysis covers three general areas:

• **Preconditions for product development**: institutional capacity, market conditions and macro-environment (including political, legal, and regulatory factors) that provide the impetus for the development of new products and shape their design.

⁴ The categories are for illustrative purposes of this case study and should not be taken as a methodology for market segmentation.

- **Product analysis**: the specific terms and pricing of the product and how they meet the needs and risks of the target market.
- **Results and refinement**: asset quality and quantity, as well as modifications made to better serve the needs of the target segment.

Below are some of the more interesting findings of the products examined.

Pawn Loans

Pawn loans are a streamlined way of delivering fast credit by taking gold valuables as collateral. The characteristics of both BSE's and CMA's pawn loans include:

- Security as well as speed. It is interesting that one of the more secure forms of microcredit has the most intangible consumer benefits: speed and security. Both institutions designed their products to deliver credit efficiently to help meet liquidity crunches, but they soon discovered that clients derived an equally important benefit in having a safe place to store their valuables.
- Lucrative pricing structure. Both institutions designed their pawn loans to have interest paid *in advance*, at the time of disbursement, putting only the principal at risk (although it is fully secured with the pawned product). The heavily discounted price per gram of gold paid further helps to minimize losses.
- **Profit center.** This pricing structure and efficient delivery system has made the pawn loan a profit center at both institutions. Revenue growth is limited, however, because of the relatively stable percentage of the low-income population that owns jewelry.

Preferential Client Loans

Preferential loans are offerings targeted to "premier" clients, based on their good track record with the institution or because of lucrative characteristics of the market segment. The two preferential client loans examined were:

- 1) *Fiduciary credit*—a type of home equity loan whereby microentrepreneurs can borrow against the value of their property to invest in working capital or fixed assets of their business; and
- 2) **Parallel loan**—an imitation of a line of credit facility whereby the borrower in good standing can take on additional, short-term credit during peak sales seasons.

Some interesting findings regarding the institutions' respective experiences in developing products targeted at preferential clients are:

- Legal and regulatory. Changes in macroeconomic and regulatory factors can create business opportunities. BSE's fiduciary credit became an attractive proposition because of the unique structure of Ecuadorian mortgage law. The fiduciary law allows a lender to take property as collateral that is less secure than a proper mortgage, but not as time consuming or expensive. BSE now can profitably offer its more established, growth-oriented clients larger loans with longer terms without requiring a co-signer.
- Creative use of capacity. CMA wanted to offer a line of credit to its diligently paying clients for their seasonal cash flow needs and to encourage additional lending to an attractive, low-risk segment. However, its systems are not currently designed to manage a credit line. By designing a quickly revolving, short-term loan that has a streamlined underwriting process, CMA was able to offer its parallel loan product, which has many of the same benefits as a traditional line of credit without re-engineering its systems.

Target Niche Products

Niche products are those targeted at specific market segments that have some unique, clearly differentiating characteristic. The two niche products examined were :

- 1) *Supplier-based line of credit*—microenterprises can draw upon to purchase inputs for production (e.g., wood for a carpenter) or finished goods for trade (e.g., food for a grocery store owner) from specific large suppliers of raw materials or wholesalers, who in turn provide a discount to the borrowers.
- 2) Agricultural credit—terms are specifically tailored to the seasonal needs of small farm owners who live in rural areas, such as interest-only grace periods and balloon-end payments tied to the harvest cycle.

Noteworthy observations for the products developed for target market niches include:

- Market structure can support risk management. BSE has interesting risk controls in both the underwriting and collections of its supplier line of credit, *cuenta solidaria*, that are based on the market structure of certain industries. The high concentration of the industries served by BSE with its *cuenta solidaria* product results in supplier power and information control that BSE can use to evaluate better the risk of new borrowers and to pressure delinquent clients into paying.
- Government programs can create market opportunities, as well as distortions. The market opportunity for CMA's agricultural credit was a result of a sector that was fostered and ultimately undermined by decades of government subsidies. The result of the support was the creation of an industry that was highly fragmented, with many small players—a structure CMA was well suited to serve.
- **Industry specific product features can reduce risk.** Both BSE's *cuenta solidaria* and CMA's agricultural credit had terms tailored to the fluctuating cash needs of its target

market. CMA's interest-only grace periods with balloon payments introduced certain liquidity risks for the lender, but its client-centered design has resulted in a product with the highest asset quality of any in its portfolio.

SUMMARY OF KEY FINDINGS

Although each of the above products has interesting characteristics that differentiate them, they also have elemental features that attribute to their success. The main findings are summarized below:

- 1) Take a *target-market approach* to product design. Microentrepreneurs are not homogeneous. Within the microenterprise sector, different segments appear with different needs and demands. Likewise, microenterprises and households have different financial needs at different times. Using a product development process that is client-centered allows commercially oriented microfinance institutions to meet both their financial as well as social goals. Products tailored to a client's financing needs have a greater impact in helping them manage the volatility inherent in the sector within which they work. Designing product terms tied to client cash flow also improves their repayment capacity, allowing the institution to sustain operation and take greater risks.⁵
- 2) **Develop** *risk management* **techniques to preserve asset quality**. Risk control measures were taken in both the delivery of the products and the actual design. Both institutions have tried to be creative and flexible in instituting risk controls to maintain the attractiveness of their products to customers while preserving asset quality.
- 3) Offer a diversified portfolio of products to penetrate more deeply into the target market. In serving multiple markets, an institution runs the risk of spreading its resources too thinly and diluting its efforts. Both CMA and BSE, however, have used their diverse product menu to provide incentives for prompt repayment and to position themselves as the one-stop shop for a microenterprise's financing needs.
- 4) **Establish a** *culture of innovation* **to develop new product opportunities**. This point is not limited to the generation of new product ideas. Rather, it is a critical component of the ongoing refinement that is necessary to ensure the product meets the needs of an ever-evolving target market. Both institutions have used technology and incentives to foster a culture of innovation that promotes the generation of new product ideas.

⁵ Additional MBP research is being conducted on housing and insurance products, as well as client and market research.

Chapter One—Introduction and Highlights

CASE STUDY I: BANCO SOLIDARIO DE ECUADOR

Institutional Background

Banco Solidario de Ecuador (BSE) was created 1995 when a for-profit finance company or *financiera*⁶ (renamed ENLACE Sociedad) merged with a nongovernmental organization (NGO) to form a hybrid institution with both social and financial goals. The three profit-seeking investors who financed the purchase had a social mission at heart: to serve the needs of economically active Ecuadorians who lacked access to conventional credit.

To create a full-service financial institution dedicated to this segment, BSE was incorporated as a holding company, Grupo ENLACE, in May 1995. Grupo ENLACE combined the newly acquired *financiera*, an investment bank (Indalva Casa de Valores renamed ENLACE Valores), with the nongovernmental development organization, Fundación Alternativa, which had been the driving force behind this social finance initiative. In December 1995, ENLACE Informático was created to develop sophisticated technological systems to support Grupo ENLACE's companies and other institutions working in the informal sector of Ecuador's economy. The following year, the Superintendency of Banks approved BSE's application to merge with Sociedad Financiera Finanbato, S.A. and convert into Banco Solidario Sociedad Anonima (hereafter, Banco Solidario de Ecuador), a commercial bank oriented to the microenterprise sector.

Having put the major pieces of the holding company in place, Grupo ENLACE started 1996 with the challenge of re-directing its bank resources to its mission of providing financial services to those without access to conventional credit. Although it started with the purely commercial portfolio it had inherited, BSE had begun an individual microcredit program in late 1995. Poor methodology and a political crisis⁸ resulted in a negative bottom line at year-end 1995. February 1996 brought a fresh infusion of capital (US\$1.7 million) from socially motivated investors who sought to shore up BSE's microenterprise portfolio. A few months later, ACCION International⁹ responded to a request from Grupo ENLACE to transfer its microfinance methodology for individual and solidarity group loans.

Eager to expand its product line and generate income using a proven product, Banco Solidario designed a pawn loan product called *olla de oro*, or "pot of gold," based on a competing, high-

⁶ In many Latin American countries, a *financiera*, or finance company, is typically subjected to fewer regulatory requirements, but its allowable activities are more restricted than commercial banks. The main difference between a bank and a finance company in Ecuador is the bank is able to mobilize savings and is subject to higher minimum capital requirements.

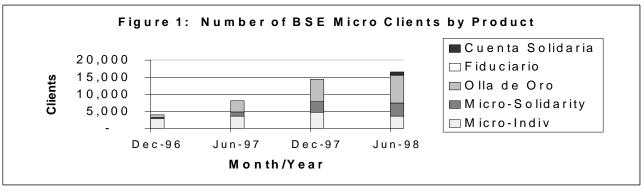
Fundación Alternativa was created as an NGO in May 1991 to provide capacity-building support and financial assistance to individuals and groups working with Ecuador's informal sector.

⁸ The long-standing border war between Peru over disputed territory around the Amazon River erupted in early 1995.

ACCION International is a nonprofit dedicated to alleviating poverty by financing self-employment throughout the Americas. ACCION works through a network of 25 affiliated microfinance institutions, including Banco Solidario de Ecuador, in providing a variety of financial services to the working poor.

demand offering from a parastatal organization. Between 1996 and 1998, BSE added a number of products dedicated to the small and microenterprise sector, subsidizing this new product development with its conventional financial services. In 1997, Banco Solidario began turning the corner with growth in its microenterprise portfolio and improved financial results. (Changes in portfolio allocation among BSE's products are shown in Figure 1.)

From December 1996 to year-end 1997, during the period that BSE successfully launched its solidarity group loan product, its portfolio at risk¹⁰ decreased from 13.67 percent to 9.11 percent. By December 1997, after welcoming additional investors,¹¹ Banco Solidario had paid-in capital of US\$11,977,401 and a net worth of US\$13,560,000.



Source: BSE company documents

By year-end 1997, Banco Solidario was looking for productive outlets for its newly invested capital. *Crédito fiduciario*, a home-equity loan, began its pilot phase after a unique aspect of Ecuadorian property law gave the bank a less costly option to mortgages. In the spring of 1998, Banco Solidario designed its *cuenta solidaria*, a line of credit targeted at industry-specific suppliers—like grocery store items and newspapers—that provide the raw materials for microenterprise producers and vendors. As of June 1998, microfinance loans (not including pawn loans) represented nearly 15 percent of BSE's total portfolio in terms of outstanding dollars and 44 percent of its total clients.

BSE has benefited from its holding company structure because it has provided both the resources and necessary expertise to experiment with new product development. For example, ENLACE Informático has allowed BSE to integrate new products into its existing portfolio more seamlessly. Moreover, ENLACE Más has supported the implementation of new products through its in-house training capabilities, allowing a more streamlined product roll-out following a successful pilot test. Finally, BSE's commercial banking activities have allowed it to proceed cautiously with product development without the immediate pressure of sustaining the organization.

¹⁰ Following ACCION International guidelines, BSE measures portfolio at risk as the outstanding balance of loans past due longer than 30 days divided by average total portfolio, a more stringent measure than required by the regulatory authorities.

¹¹ CARE Ecuador and ACCION brought nearly \$US9 million of equity to the already well-capitalized microfinance institution.

MARKET SEGMENTATION

Banco Solidario de Ecuador was founded expressly to serve a commercially uncontested target market—the "70 percent of the country's economically active population without access to convenient and timely financial services." Although BSE offers financial products to both conventional and "nontraditional" businesses, this analysis will focus on the products contained within the latter portion of the bank's portfolio. In practice, this dedication has translated into a mix of both consumer and business credit—respectively via its pawn and micro (individual and solidarity group) loans—targeted at both marginalized salaried workers and self-employed microentrepreneurs.

Initially, BSE did not further segment this underserved portion of the market. Its priority in 1996 was growth, so it targeted standardized high volume products, like its pawn loan, *olla de oro*. As its microcredit portfolio grew, BSE approached the market more strategically. Although BSE has always been committed philosophically to meeting unmet credit needs for consumption as well as production, its emphasis is on business financing. Consequently, BSE further segmented the business market to define its desired portfolio of microfinance products.

As shown in Figure 2, BSE has segmented the business market and targeted its microfinance products accordingly. The "enterprise type" pyramid is segmented by the *size* of the business (in terms of number of employees and sales), which varies inversely with the total *number* of businesses in a given category (i.e., the number of microenterprises operating is exponentially greater than the number of large corporations). This segmentation is related to its repayment analysis, measured in terms of *willingness* and *capacity* to repay. The basis of underwriting for microfinance, particularly for the lowest market segments, is primarily an analysis of character (i.e., willingness to pay): social guarantees replace the typically nonexistent collateral. As one begins to move upmarket to target expanding and more formalized microenterprises on the verge of transforming into "small businesses," however, increasing emphasis is placed on financial analysis to determine the borrower's *capacity* to repay.

The remainder of the chapter is dedicated to a more in-depth look at a few of the products that arose out of Banco Solidario's market segmentation: *olla de oro* (pawn loans), *cuenta solidaria* (targeted lines of credit), and *crédito fiduciario* (alternative mortgage loans). A summary of the general terms of these three products is provided in Table 2, including BSE's traditional microlending products (i.e., individual and solidarity group loans) as points of reference.¹⁴

¹² From a BSE brochure. Although conventional financial products are heavily weighed in BSE's portfolio, BSE's intention is to slowly convert its portfolio to this underserved part of the Ecuadorian economy.

¹³ Fidel Durán, Vice President for Microenterprise at BSE, also noted that given the fungibility of funds and the cost of loan use verification, it was very possible that its consumer products (i.e., *olla de oro*) were used for business purposes.

It should be noted that the *olla de oro* is not really considered part of BSE's *microenterprise* portfolio because the majority of borrowers are consumers from more established segments of the economically active population. Although some microentrepreneurs do finance their businesses through this product because of its lower interest rate and streamlined approval, comparisons between *olla de oro* and the other dedicated micro products should be made with caution.

Figure 2: Business Market Segmentation and Microfinance Product by Target Group

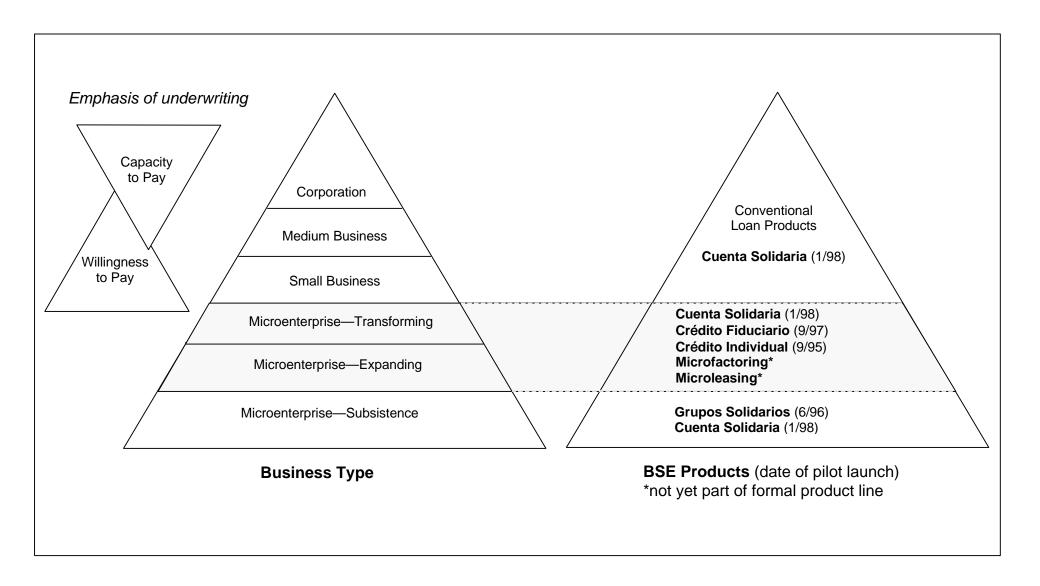


Table 2: BSE Microfinance Product Summary

		Crédito Solidario	Cuenta Solidaria			
Product Characteristics	Olla de Oro (Pawn Loans)	(Solidarity Group Loans)	(Industry-Based Lines of Credit)	Crédito Individual (Individual Loans)	Crédito Fiduciario (Home Equity Loans)	
Target Market	Economically active population; lack access to credit; mostly salaried workers	Lower income microenterprises; less than 6 months of operating history; lack formal guarantee	Industry segmentation by suppliers, micro- enterprise retailers, manufacturers, and traders	More established microenterprises; more than 1 year of operating history; have guarantee	Higher income, more established microenterprises; home owners; lack co-signer	
Eligible Uses	Unrestricted, but mostly consumption	Working capital only	Purchase of wholesale goods or raw materials	Working capital; fixed asset investment	Working capital; fixed asset investment	
Loan Size ^a —Minimum —Maximum —Average (6/98)	\$50 \$3,000 \$165	\$50 \$1,500 \$215	\$50 None \$375	\$500 \$5,000 \$710	\$2,000 50% of property value \$2,830	
Repayment Terms	30, 60, or 90 days with infinite renewals as long as interest paid up-front One-time principal payment at maturity:	90 to 180 days Equal payments every 7 or 15 days	Up to 180 days Payments every 15, 30, or 45 days	120 to 360 days Equal payments every 15 or 30 days	180 to 720 days or longer based on business growth and repayment Equal monthly payments	
Guarantees	interest paid in advance Gold jewelry/watches	Collective group (4 to 8 borrowers) guarantee	Personal guarantees or household/business collateral; supplier leverage	Personal guarantees; household/business collateral; movable assets	Property/real estate (house, land)	
Pricing ^b (and other fees)	Prime + 5% < \$200; Prime + 3% > \$200° Commission = 6%; Taxes = 2.6%	Prime + 13%	Prime + 10.5%	Prime + 5% to 9% (decreases with repeat loans)		
Real ^b Effective Annual Rate	78%	35%	33%	27% to 31%	25%	

^a Dollar equivalents based on July 1996 exchange rate of US\$1 = 5,300 sucres, unless credit policies indicate equivalent US\$ amount. ^b Interest rates do *not* fluctuate, but are fixed periodically based on the Central Bank prime rate. Chart was created when prime = 49% and

^b Interest rates do *not* fluctuate, but are fixed periodically based on the Central Bank prime rate. Chart was created when prime = 49% and inflation = 34.2%.

^c Interest on pawn loans paid in advance and deducted directly from initial disbursement.

OLLA DE ORO

BSE's *olla de oro* (OdO) is a pawn loan product that provides quick and easy credit to borrowers who have gold valuables to put up as collateral. Like most consumption loans, the underwriting is formulaic, with little emphasis put on the use of funds. The risk (created by cursory underwriting) and return (limited by small average loan amounts) are managed through collateral and volume, which provides portfolio diversification. Since the pawn loan portfolio is made up of small loans, volume also helps achieve profitability. To generate volume, BSE placed emphasis on streamlined underwriting based on the gold's value.

Preconditions for New Product Development

Institutional Capacity

Much of the impetus for developing the OdO in mid-1996 revolved around BSE's recent conversion into a bank in search of an established, standardized product it could scale up relatively quickly. The initial appeal of the OdO pawn loan was the straightforward underwriting process and risk control, both of which centered on formulaic valuation of gold and imitated the best practices of its competitor. This "me-too" product strategy provided a secure, high-growth way for BSE to employ its idle assets.

The principal capacity issues involved both structural security and personnel expertise. Holding physical collateral required heightened security, including full-time guards and secure safe-deposit boxes. BSE supplemented its insurance policy to cover the pawned collateral. It also hired a jeweler with the necessary equipment, such as scales and caratindicating liquid. Although the initial pawn loan application requested financial information from the borrower, the emphasis of the underwriting was on the valuation of the jewelry.

OdO required no unique systems—just the ability to track the maturity dates and notify delinquency in a timely way. Likewise, BSE learned the hard way how important it is to have information management staff involved in the design phase. BSE paid the price for this omission by having to recode all the jewelry it had collected so that it could be tracked correctly in the existing system.

Market Conditions

BSE was able to piggyback on the groundwork laid by the relatively inefficient government provider, Monte de Piedad. ¹⁵ BSE managed to leverage successfully both the customer recognition of this product and the know-how its competitor had developed, correcting for its weaknesses. ¹⁶ The competitors' terms were reasonable, but its application process was

¹⁵ Monte de Piedad or "assistance fund" was a loan product that the Ecuadorian Social Security Department had been offering for decades.

¹⁶ BSE's first product manager was a former employee of the parastatal institute, Monte de Piedad.

cumbersome. As one loan officer remarked, "The lines would start at 5 a.m. and continue all day."

The parastatal had built up a portfolio of 800,000 clients, part of which BSE hoped to capture through a more streamlined delivery system and higher valuation system.¹⁷ The higher gold prices were a visible strategy to draw customers immediately, whereas the efficiency would have to be demonstrated over time. BSE demanded higher interest rates but processed loans faster.

Macro-Environment

During 1995, the year before product launch, Ecuador underwent a political and economic crisis provoked by a long-standing border war with its neighbor, Peru. The resulting political and economic instability made a tested product based on a relatively stable commodity extremely attractive.

Ecuadorian law has standard consumer protection statutes that are spelled out in the loan document, which is a custodial contract outlining the respective rights and obligations on the part of the borrower and lender. BSE acts as custodian for the jewelry that is put up as collateral by the borrower, who in turn must promise that the security is not "encumbered"—that is, used as security for another obligation. The contract gives the bank the right to sell the jewelry in the face of a default, and the bank is not required to give the borrower notice.

The legal recourse provided by this contract was not a specific requirement of the Ecuadorian Superintendency, whose regulations are generally lax. For example, OdO was not subject to higher provisioning requirements, because Ecuadorian regulators do not require risk classification by credit use—i.e., for consumer vs. commercial purposes. In fact, the only provision outlined by the Superintendency is related to the aging of a bank's portfolio, with no differentiation made between microcredit and conventional loans (and the corresponding collateral used), which is required by banking regulations in neighboring countries.

Product Analysis: Characteristics and Delivery

Target Market and Delivery

The loan is targeted at low- and moderate-income consumers, primarily wage workers. Only basic personal data on the customer (such as name, family reference, telephone, and address) are collected so there are no current statistics on average client income. Initially, however,

¹⁷ BSE initially offered 18,000 sucres (\$5.64 in 1996) per gram of gold vs. 14,000 sucres paid by the competition, but BSE subtracts the weight of precious stones and other non-gold parts of the jewelry. BSE's valuation is still higher, but it is less than the highly touted differential.

¹⁸ All Ecuadorian banks are required to provision 20 percent of their loan portfolio that is less than 90 days past due and 50 percent for those loans between 90 and 180 days past due.

BSE requested information on asset levels, both fixed and liquid, which typically averaged US\$3,500 per client.

BSE does not track the use of funds for this product, but clients indicated in conversation that proceeds were used for school tuition, medical expenses, and household emergencies. Although these funds are not directly targeted at generating productive assets, BSE considers OdO to be an important complement to income-generating activities. Having a product specifically designed for consumption discourages the blurry line informal businesses often draw between business and personal expenses. It also minimizes undercover switching, when lenders borrow for one purpose but use the loan for another purpose.

Table 3: Olla de Oro Summary Statistics

Olla de Oro	Dec. 1996	June 1997	Dec. 1997	June 1998
Amount disbursed (\$US)	\$213,530	\$797,977	\$1,373,691	\$1,417,494
Average loan size (\$US)	\$271	\$329	\$240	\$165
Exchange rate (sucres/\$)	3,592	3,955	4,394	5,236
Price: >\$200/<\$200	52%/56%	48%/50%	46%/48%	54%/52%
Active Clients	763	3,283	6,633	8,054
No. of loan officers	3	4	5	6
Clients per loan officer	254	821	1,327	1,342

Source: BSE company documents

The method of promotion, however, reflects the higher market segment. Television, radio, and newspaper advertisements and product brochures are aimed at an upmarket clientele: "Su tiempo es oro ... y su oro vale plata" (Your time is gold ... and your gold is worth money). The initial campaign emphasized the customer's ability to obtain money "instantaneously" and "securely."

The loan application process is incredibly streamlined, with the entire process, from solicitation to approval, taking about 15 to 20 minutes. This efficient delivery is tailored to the needs of the target consumer, who typically has an urgent liquidity need. Loan officers make appointments on the half-hour, but they also attend to walk-ins. Repeat loans and extensions take from 5 to 10 minutes to complete.

Terms and Pricing

The maximum loan amount is a direct function of the weight and quality of the gold being offered as collateral. The value paid per gram of gold is based on its quality, measured in carats. BSE pays 14,000 sucres (US\$2.65) per gram for 14-carat gold and 22,000 sucres (US\$4.15) per gram for anything higher. This valuation is readjusted periodically based on competitive considerations and, to a lesser extent, major swings in the market price of gold. The maximum loan amount is S15 million (about US\$3,000) and the minimum, S250.000 (about US\$50).

OdO loans can be paid in 30, 60, or 90 days, completely at the borrower's discretion. The customer can borrow any amount up to the loan value set by the formula above. The total interest is paid up-front and deducted from the initial loan disbursement. The entire principal is paid as a balloon payment at maturity, unless the loan is renewed. If the initial loan is less than the maximum set by the formula, the borrower can automatically apply for an increase at the time of maturity, paying only the up-front interest. The length of the loan can also be extended at time of maturity, with the borrower choosing the renewed term of 30, 60, or 90 days. In fact, the loan can be renewed indefinitely, as long as the interest is always paid in advance, at the time of renewal. Although the principal can effectively be rolled-over in perpetuity, its value is protected by the gold serving as collateral. The average term is a little over nine months.

The interest charged is based strictly on financial and risk considerations, as BSE has decided to compete on delivery, rather than price, for its pawn loan product. BSE charges differential interest based on the size of the loan: 52 percent (prime plus 3 percent) if the loan is greater than S1 million (US\$200) and 54 percent (prime plus 5 percent) if it is less. BSE charges a flat rate of interest higher than its competitor's rate, but it also pays a higher price per gram of gold. Like the value paid for gold, these interest rates are fixed, but periodically adjusted based on market conditions. Built into the interest rate is the cost of holding the collateral, including a custodial charge (6 percent) for proper storage and safekeeping and a judicial fee to cover the expenses involved in registering the jewelry to enable sale in the event of default. Because of these fees and the advanced payment of interest, the effective rate (not inflation adjusted) for the OdO is over 100 percent, depending on the amount of gold offered.

Risk Management

Like most consumer loans, OdO is a risky product in terms of repayment. Historically, its delinquency rate (around 8 percent) is second only to BSE's individual microcredit product's rate, which is atypically high because of early portfolio contamination. Risk is managed through conservative valuation and pricing of the gold, high loan volume, and contractual recourse in the event of default—the last of which depends on the local legal system. The value paid per gram is about one-third to one-half the market price of raw gold¹⁹ and ranges from one-third to one-quarter its wholesale price as finished jewelry. BSE pays less per gram for lower quality gold and charges more for smaller loan amounts, incentives to borrowers to bring in high quality and greater quantity of gold. With more at stake, BSE finds that borrowers are less likely to default.

Because the loan underwriting is based on the gold quality—not on the characteristics of the borrower—hiring a specialized appraiser is a key element of risk management. The ability of the loan officer to tell by sight the quality of the gold and the weight of precious stones²⁰ dramatically accelerates the underwriting process, which has allowed BSE to build up

¹⁹ Based on the *Wall Street Journal's* 12-month average of \$280/troy oz. = \$9/gram (1 troy oz. = 31.103 grams).

grams).

The jeweler was able to estimate *by sight* the weight of any stones to deduct from the total valuation of the jewelry, which accelerated the process.

volume quickly but prudently. The increased revenues help offset the financial impact of delinquency and default.

BSE has instituted a number of risk control measures in its pricing policy. First, BSE only has the principal portion of its OdO at risk because it requires that interest be paid in advance.²¹ During the first 30 days the loan is past due, interest accrues at a rate equivalent to 55 percent annualized (which is 1 to 3 percent higher than the initial price). In addition, the borrower is assessed a flat fee of 4 percent of the loan amount as a management expense, to help offset the administrative costs of recovering delinquent loans.

Recovering principal, like the underwriting process, is highly standardized. During the first 30 days the loan is past due, the borrower is contacted for payment and warned of the possible liquidation of the collateral. On the 31st day, the jewelry becomes property of the bank, which procures an external fiduciary agent to sell the jewelry. This liquidator will sell the jewelry in public auctions or directly to jewelers. Because the bank typically waits until it has amassed a number of items for auction to save on administrative expenses, tardy clients sometimes can reclaim their jewelry. This extra way out reduces ill will from customers who have sentimental attachments to their jewelry. It also enhances BSE's image as a bank concerned with the disenfranchised. Nevertheless, BSE is taking measures to accelerate the liquidation process—such as establishing set auction times—because of the costs of holding on to nonproductive assets and to reduce leniency to control delinquency.

Results and Refinements

BSE has modified aspects of its *olla de oro* product to improve efficiency and delivery. The loan application process initially included a cursory underwriting of the borrower's payment capacity. For example, the borrower had to provide a list of assets—both liquid and fixed, including property. The additional information, however, provided minimal risk abatement at a relatively high cost of additional time. The gold itself provided sufficient security, especially since its market value has appreciated.

BSE has also been able to **improve productivity through adjustments of its incentive system**. The credit officer (gold assessor) earns a fixed commission based on the number of loans. Originally, OdO officers also received a bonus tied to the average portfolio. BSE has since eliminated this portfolio-size incentive and offers just the fixed rate bonus to avoid perverse incentives to over-value jewelry. Although the size of the bonus is less than for those earned by loan officers dedicated to microenterprise products, the nature of the two jobs and client segments are quite different.²² Consequently, OdO officers have been able to build up a portfolio with almost four times the number of clients of their microcredit

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²¹ This advanced interest is listed as a liability on the balance sheet until the loan matures because, in the event of a prepayment, BSE will reimburse the overpaid, accrued interest.

OdO loan officers essentially have a desk job, rarely leave their weighing station, and have a rather anonymous relationship with clients. In contrast, micro loan officers spend half of their day in the field, write up loan analyses in the evening, and have a personal rapport with their clients.

colleagues. From a starting point of 254 clients per OdO loan officer, each officer now manages over 1,300 borrowers.

Finally, BSE has **streamlined its product offering to focus on the highest value added, most profitable aspects**. Initially BSE offered loans for 10- to 24-carat items but narrowed the band of options once volume built up. The slimmer margins on the lower quality (10 and 12 carat) items did not cover the cost of redemption in case of default. The other implicit rationale in eliminating the lower gold quality involved an informal screening mechanism, as better jewelry gave an indication of the clients' income levels and their corresponding ability to pay. Nonetheless, BSE reduced the price differential between OdO loans above and below 1 million sucres (US\$200). The greatest demand is for credits less than 1 million sucres, and BSE realized that it could not excessively penalize borrowers for these smaller loan sizes and remain competitive. Instead, BSE increased the differential *value* paid for loans of different quality. While initially, it offered 19,000 sucres per gram of gold, now BSE offers 14,000 sucres for lower quality jewelry and 22,000 sucres for 18 carat and higher.

By measures of volume and profitability, *olla de oro* has been a successful product. The pricing strategy—a flat rate of interest paid in advance—has meant up-front income and a lower provisioning expense because only the principal is at risk. BSE has been able to maintain a financial margin on OdO near 4 percent. Operating expenses, ranging from 2 to 3 percent, have gone down as productivity has improved. These operating expenses include the administrative costs of selling jewelry to recover payments, making the adjusted return on assets for OdO about 3 to 4 percent.

The other success benchmark is BSE's **strategy to refocus its portfolio on those parts of the population that are not served by the traditional banking sector**. OdO provided a good entrée for BSE to enter the low-income market in a lucrative way. The subsequent products BSE designed were meant to complement this consumer credit by targeting the microenterprise segment of the economy.

CRÉDITO FIDUCIARIO

Crédito fiduciario (CF) is like a home equity product whereby microentrepreneurs can borrow against the value of their property to invest in working capital or fixed assets for their business. Although similar to BSE's individual credit, CF is designed to finance larger scale, longer term projects. Because of the legal issues particular to Ecuador, the lien taken against the property is neither as secure nor as expensive as a formal mortgage.

Preconditions for New Product Development

Institutional Capacity

The capital infusions that accompanied Banco Solidario's transformation into a formal bank created additional pressure to put its idle assets to productive uses and build its loan portfolio.

BSE had an operational foundation upon which to build sufficient capacity to offer CF. Although providing home equity credit was a new area of business for BSE, the required expertise was more legal than commercial. As a formal financial institution, BSE had a legal department that could assist in interpreting the somewhat complex housing code to analyze the tradeoffs of different types of collateral—*hipotecarial* (mortgage) vs. *fiduciario* (a weaker property claim). In addition, BSE had as part of its holding company ENLACE Fondos, which could act as the fiduciary trust, independent from the bank and legally authorized to administer the funds. For underwriting purposes, BSE had to adjust its existing credit scoring system to analyze the repayment capacity of this higher market segment, but the template was in place.

BSE had to develop the expertise to determine appropriate valuations with prudent discounts for different types of collateral. For loans greater than US\$10,000, BSE contracted professional property appraisers to determine the fair market value. For smaller loans, the loan officer had to be trained on estimating values based on location, zoning, and property development. In addition, BSE had to build its underwriting capacity, which had specialized in financial analysis.

As it branched out into a new line of products, BSE needed a more sophisticated risk control apparatus. Although BSE had risk managers on its staff, it decided soon after launching to create a dedicated department to adjust its risk management strategy to its new level of exposure. BSE, like all Ecuadorian financial institutions, benefits from the country's well-developed credit bureau (Central de Riesgos) that collects and updates industry data monthly. From this central database, BSE was able to create its own information by economic sector: retail, restaurants, textiles, carpenters, services, and so on.

Market Conditions

The market conditions that gave rise to this product center on the nonresponsive conventional banking sector, which focuses its services on the wealthier, more formalized part of the economically active population. Even microenterprises with growth potential continue to face complex procedures and demanding financial documentation to access conventional bank credit. The continued exclusion of this potentially vibrant sector opened up an opportunity for BSE to develop a new product to meet the needs of growing microenterprises.

BSE "discovered" this market opportunity from a gap in its own product offering because it was losing attractive, existing borrowers who were seeking larger individual loans. These more established microenterprises often could not find a co-signer willing to pledge assets to back the higher loan amount. But a relatively large amount of these microenterpreneurs did own small amounts of property—either land or homes—because of property reforms in the early 1970s. Approximately one-fifth of CF's earliest clients were microenterprises that were initially interested in BSE's individual loan but needed larger loans. The only other competition for this more established microenterprise segment were informal moneylenders who charged significantly high interest rates.

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Macro-Fnvironment

The intricacies of Ecuadorian property law and bank regulatory system helped define the nature of this product. The lower provisioning requirements for CF were particularly attractive to the highly liquid BSE, which was feeling profit pressure in 1995 when the country's political crisis²³ led the superintendency to increase the minimum net worth requirements of all banks. Mortgaging a property and transferring ownership in the face of default are bureaucratic and costly processes, on both the front and back ends of a loan. It would be difficult for BSE to recoup the costs of the mortgage process,²⁴ which is why it opted for the less cumbersome *fiduciary* route. This option became possible because of a law passed in 1993 that permitted securing property administer by an independent third party.

As its name implies, *crédito fiduciario* involves a third-party funds administrator, or fiduciary, that takes claim to the property for the duration of the loan. The loan term defines the length of the fiduciary contract, which is automatically terminated once the loan is repaid. In the event of default, the fiduciary promises to sell the property and transfer the proceeds to the *beneficiary* (BSE) to pay off the outstanding debt, with any remaining funds over and above legal and administrative expenses returning to the *constituent*, the borrower. In this way, the bank does not have to take a claim on the property and carry it on its balance sheet, nor is it required to seize the property in case of nonpayment. All the cost-intensive, administrative responsibilities a bank typically undertakes when mortgaging property are handled by an independent third party, the fiduciary trust.

Product Analysis: Characteristics and Delivery

Target Market and Delivery

CF is designed as a larger loan than BSE's individual credit because of the target market segment (property owners) and the legal costs involved in securing the collateral. The microentrepreneurs for which CF was designed typically are more established businesses with a diversified base of clients and suppliers. They usually have checking accounts with overdraft facilities, dedicated business telephones, and some credit history. The majority of CF loans go for machinery, commercial vehicles, or construction uses. Although data were not collected on the average income levels of clients, a random sample of CF borrowers had an average of US\$15,000 in personal and business assets. The other differentiating feature of this target market is that their microenterprises are growth-oriented with high rotation of capital.

²³ The disruption in commerce and lost tourism revenues resulting from the border war with Peru sparked off a recession in early 1995.

Notary fees cost about 80,000 sucres (US\$15) per transaction, plus a percentage of the property being registered.

The underwriting of CF is similar to BSE's individual microcredits, though it involves a greater level of financial and technical analysis. Both products are underwritten by the same loan officers, who treat CF as a marketing tool to offer preferential clients larger loans at better terms. The typical CF client will come to the bank seeking an individual loan, but with a need greater than the maximum limits (US\$5,000) for this loan. Besides offering the property for security, borrowers must have an established microenterprise with at least one year of operation in the same site. The microenterprise must also provide the majority of the household income. The loan officer will also ask for a commercial reference, such as a supplier. The main difference in underwriting is the collateral valuation, which is appraised based on the location, zoning, and level of development of the property.

Terms and Pricing

CF are the largest and longest of BSE's microenterprise loans, reflecting the more mature sector they target. The minimum amount is US\$2,000 and the maximum is half of the value of the property being pledged as collateral, although first loans cannot exceed US\$8,000. The terms for CF are for 360 to 720 days for initial loans, with regular monthly payments. Incremental increases in both the size and length of the loan are based on business growth and repayment performance.

The interest rate charged on CF is the lowest of any of BSE's other microenterprise loans. Unlike the OdO, which is comparably priced for loans over US\$200, the 52 percent rate that CF carries reflects its low risk rather than low cost as well as the greater price sensitivity of its target market. The collateral—which has a determinable market price and, more important, great value to the client—helps mitigate the risk. The price sensitivity comes from the more formalized market segment—property owners—which is typically better educated and has greater access to alternative credit sources (typically, friends and family).

Risk Management

Loan officers initially are responsible for their own collections, and the incentives are designed accordingly. As with individual loans, officers earn a commission for each credit (0.3 percent of loan amount at the time of disbursement) and 1.2 percent based on loan recovery/days delinquency. Like all other BSE microcredit products, once a CF loan reaches 45 days past due it is transferred over to the collections department for legal workout.

The law governing fiduciary trusts outlines the specifics of how the beneficiary, BSE, can claim the proceeds promised by the borrower. The fiduciary must go before a local magistrate to exercise the workout proceedings specified in the contract before putting the property up for sale. Although BSE formally registers the property in the relevant municipality, it does not have the same claim on the borrower's asset as it would if it were mortgaged. Unlike a mortgage, whereby the borrower transfers title of ownership to the bank, the fiduciary trust requires only a pledge to an outside third party. BSE takes a risk that the fiduciary trust will adjudicate any repayment issues fairly and swiftly in the event of a

default.²⁵ To date, BSE has not had to depend on the collateral sale as a stop gap source of repayment.

Results and Refinements

BSE has had initial success with CF in terms of asset quality, although profitability analysis is still premature because the product is new. CF more than doubled its portfolio of new accounts during the first half of 1998, for an outstanding portfolio of US\$784,000 to 265 clients. The **portfolio growth is in part a result of a publicity campaign** BSE undertook to expand its market beyond its existing microcredit clients that were ready to graduate to higher loan amounts. Part of this sales technique is highlighting diverse uses of loan proceeds, such as façade improvement and equipment purchases.

BSE has managed to keep its delinquency down to 2.3 percent (longer than 30 days past due), with no write-offs to date. BSE attributes CF's high asset quality to the clients' fear of losing valued assets in the face of a clearly delineated legal recourse executed by a neutral third party. Another explanation for this low delinquency is that this relatively new product is targeted at more established customers with a track record of repayment.

The costs of executing a CF are relatively high in an absolute sense, but a bit more comparable to BSE's other microcredit products as a percentage of average loan size. BSE has been able to **drive cost per loan down through experience and lengthened loan terms**. Initially, BSE hired a professional property appraiser for all CF loans as a risk control measure, though now it undertakes that expense only for loans over US\$10,000. For smaller loans, CF credit officers are able to make educated appraisals based on market prices of adjacent property and previous capital investments.

Currently, CF does not cover its costs because the productivity of this new loan is still low and it is one of BSE's lowest priced products. BSE hopes to maintain the number of dedicated CF credit officers as it pursues continued portfolio growth. It also expects both the average loan term and size to grow incrementally as borrowers take out repeat credits. Both trends will help CF break even, as long as current asset quality is maintained.

CUENTA SOLIDARIA

Cuenta solidaria (CS) is a line of credit that a microenterprise can draw on to purchase raw materials for production or finished goods for trade. It is offered to enterprises that purchase these items from large suppliers of raw materials or wholesalers. It is managed much like an interest-bearing checking account with an overdraft facility, which accrues interest, and which the microenterprise can draw upon for its liquidity needs.

²⁵ Clause three of the fiduciary contract requires that the administrator execute a property sale "at the best possible market price ... that arises from an expeditious process."

Preconditions for New Product Development

The idea for this product came from a BSE shareholder, who is on the board of a supermarket supplier that drew a good percentage of its customers from BSE's target market. After a test introduction, BSE undertook a market study in December 1997 to analyze the frequency and quantity of purchase to determine if this market segment could support a new product.

Institutional Capacity

The most significant challenge BSE faced in implementing the CS was developing the systems capacity required to manage the disbursement and collection of this quasi line of credit. This process became even more complex because of the multipurpose design of CS, which was a savings account, checking account, and line of credit bundled into one product. Accordingly, the system had to *credit* accrued interest to the client's account when the balance was positive and *debit* interest expense when the borrower drew on the line to make purchases. These additions and deductions had to be tracked daily and balanced monthly to determine the borrower's payment. In addition, BSE needed a real-time electronic link with the suppliers with which it partnered to notify them of overdrawn or delinquent accounts. The suppliers also wanted a way to redeem the vouchers for cash payment quickly.

BSE also needed a full-time staff person dedicated to managing the new program. BSE hired a person with commercial banking and marketing experience to be the CS manager because the job requires someone with professional credibility to negotiate the credit arrangements with corporate suppliers. In addition, much of the product's success is predicated on the ability to identify profitable industry niches with the characteristics conducive to a supplier-based credit program.

Market Conditions

The highly concentrated nature of the industries targeted for CS made this product particularly attractive because of the risk control it implied. Suppliers typically monopolize the lion's share of the market. This power provides critical leverage over delinquent microentrepreneurs, whose supply is cut off until repayment resumes. In addition, the supplier's focal position gives it information about the microenterprise purchasers—valuable in the underwriting process—which can be shared with the lender. The other distinguishing feature is a fragmented distribution system that allows the bank to provide value-added services to the supplier. In effect, the bank's branch network acts as the distribution system through which the supplier can more easily access cash payments.

The only competing product for the CS are loan sharks, who charge up-front interest at exorbitantly high rates (sometimes as high as 10 to 15 percent per month).

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Macro-Fnvironment

There were no unusual legal and regulatory issues involved in the design of CS, as lines of credit have been a standard component of most banks' menu of loan products. Because CS was designed to purchase assets with well-defined values, it was viewed as no more risky than BSE's existing microloans and thus has similar provisioning requirements. The three-party transaction required legal agreements among all involved—BSE, the borrower, and the supplier partner. The CS vouchers—issued by BSE and used as cash substitutes by the borrower to purchase supplies—require matching signatures, much like a traveler's check, to reduce fraud. To protect borrower confidentiality, the supplier only shared the names and commercial information (such as the frequency of purchase) of its customers with BSE. All additional data are accessed through the country's centralized credit bureau, Central de Riesgos, to screen clients.

Product Analysis: Characteristics and Delivery

Target Market and Delivery

CS is a product designed for and targeted to two interrelated target markets: microenterprises and the large suppliers and wholesalers upon which they depend for raw materials to manufacture finished products or goods to purchase for retail trade. The target market are those industries that have many small-scale producers with short operating cycles and that depend on a few large suppliers for their key inputs. BSE undertakes a feasibility study for any prospective supplier partner, analyzing the monthly demand, the frequency of purchase, operating margins, and other industry characteristics to identify attractive segments. Currently, BSE's target clients come from many sectors, including agricultural and dairy products, wood, cosmetics, newspapers, and textiles.

CS is similar to trade credit because microenterprises use CS to purchase their essential business inputs during liquidity squeezes or to take advantage of bulk discounts. The checking account and line of credit function are valuable to the client by providing instant liquidity when needed and charging only when drawn upon. CS also gives suppliers quicker access to cash, instantaneously transferring funds from the client's account. ²⁶ CS effectively shortens the operating cycle of both target markets: the microenterprise, by lengthening its days payable, since the CS repayment terms are typically longer than the trade credit; and the suppliers, by reducing their days receivable to zero. Another benefit is the discount microenterprises receive from suppliers for purchasing with CS because of prompt payment. Moreover, microenterprises draw from CS only when cash is needed, taking advantage of more liquid periods by accruing interest on savings.

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²⁶ The value to BSE is that it opens a new account with a large industrial supplier, creating opportunities for cross-selling its more traditional financial services.

Loan "disbursement" comes in the form of a voucher authorizing the payee (the supplier with which BSE has negotiated a relationship) to debit the borrower's account. Like a traveler's check, the borrower signs the voucher in the presence of the loan officer and then co-signs before the supplier, which provides raw materials or goods in exchange. The supplier redeems the voucher for cash from BSE, which in turn debits the borrower's line of credit. Interest is charged on the amount debited, although it accrues when the client redeposit any proceeds from sales back into the CS.

Suppliers provide BSE with a list of clients, including the client's credit history with the supplier. Once BSE's risk analysis department screens the list, it is divided geographically and given to loan officers to generate sales prospects. Loan officers then contact the customers of particular suppliers to market the financial product. They earn a commission for each loan disbursed (S15,000 or US\$3 per new account) and for collection, equal to 1.2 percent of the loan amount, scaled according to days delinquent. The amount of up-front commission is less than for an individual credit because as a line of credit, the CS asset does not earn income until it is drawn upon. This differential encourages the sales force to be more proactive, actually going to the site of the supplier to prospect potential clients.

Terms and Pricing

CS offers a 180-day line of credit with a repayment schedule that matches the borrower's operating cycle—namely how long it takes a business to convert its inputs into cash.²⁷ As reflected in Table 4, the repayment schedule can vary from bi-weekly to bi-monthly, depending on industry characteristics. For example, microenterprise traders have much quicker inventory turnovers than carpenters and thus have shorter repayment periods.

Table 4: Cuenta Solidaria Summary Statistics

Date Acct. Established	Products	Type of Microenterprise	Repymt. (days)	No. of Accts.	Avg. Draw	Past Due > 30 days
Jan. 1998	Agr. Products	Commerce	15	496	\$256	5.5%
March 1998	Wood	Carpenters	45/60	175	\$614	1.5%
April 1998	Jewelry	Retail	15	14	\$126	0%
May 1998	Newspapers	Newsstands	15	31	\$356	1.7%
June 1998	Fabrics	Clothing mfg.	30	1	N/A	0%

Source: BSE company documents

Like all BSE products, the underwriting involves a dual analysis of both the capacity and the willingness of the borrower to repay. However, in evaluating the financial viability of a particular deal, BSE factors in the improved gross margin that comes from the discounts borrowers will receive from the supplier because of prompt payment²⁸ or bulk purchase. In other words, a lower cost of goods sold will improve the borrower's capacity to repay.

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²⁷ A typical calculation for the operating cycle is days receivable + inventory – days payable (usually trade credit) – accruals (typically wage expense).

²⁸ Typical terms of trade credit include discounts for payment within a certain time period.

CS is one of BSE's most expensive microloan products (excluding OdO, which is not classified as a microenterprise loan product in this paper), second only to its solidarity group credit. The relatively high interest rate (59.5 percent in June 1998) is based on the additional transactions costs required to manage a revolving line of credit. Weekly disbursements and repayments are not uncommon, especially for trades with short operating cycles. In addition, since the CS pays interest when the account has a positive balance, the systems must recalculate the appropriate debits and credits daily.

Risk Management

CS manages risk on both the front and back end of the loan process. The supplier plays a key role in the credit, helping to manage the risk of both underwriting and collections. On the front end, the supplier identifies those microenterprise customers that have been reliable payers and well-run businesses, providing BSE with "character" collateral. On the back end, BSE can use the supplier as leverage to demand payment. When a client's loan goes past due, BSE notifies the supplier, which in turn puts a hold on any subsequent sales until the borrower is current on his or her debt service. The suppliers have a mutually beneficial interest in assisting because BSE has enabled them to move into cash-based transactions.

Results and Refinements

CS is BSE's newest product offering. BSE currently is undergoing refinements to streamline the product and its delivery to improve profitability. The first adjustment was to **unbundle the multiple products offered through CS, to concentrate on those of most value to the customer**. The four different products bundled into CS—a traveler's check, line of credit, checking account, and savings account—had differential value to the target market. The greatest benefit came from the liquidity CS provides through its line of credit and checking account functions. The savings function had the least value to clients, who could earn a much higher return employing any idle capital in purchasing business inputs for sale. Traveler's checks were the next lowest value because they are a cumbersome way for both the microenterprise purchaser and the supplier to carry out a transaction.

BSE is working to overcome the cumbersome process caused by technological limitations and is moving towards paperless transactions. The vision is a "smart card," which will provide a seamless connection between the industry supplier and the microenterprise, making BSE's financial intermediation almost invisible. Rather than presenting a voucher, the client will use a *tarjeta solidaria* (solidarity card)—personalized with the client's photo, signature, account number, and supplier name—to purchase goods and raw materials. The client will be able to use the card to obtain account information—such as outstanding balance, available credit, and payment information—at a dedicated automated teller machine. Similarly, the supplier will receive daily e-mail messages with the names of delinquent clients.

This technology will help address the processing aspects of the line of credit, whose revolving nature is very different from BSE's other micro-oriented products. CS was initially priced in line with BSE's other individual microcredit product. BSE has since increased the rate of interest it charges to cover the higher transaction costs associated with managing the line of credit, including daily recalibration of interest accruals based on drawdowns and issuance of vouchers as receipts of payment.

CS is not covering its administration costs because it is still in its pilot phase. Initially, BSE took a staff-intensive approach to manage the risk of the new product, using six promoters (the credit officers who bring in the sales prospects) and six analysts (who underwrite the loan), averaging 12 accounts each. **With more established distribution channels, BSE is working to streamline its delivery** by reducing its specialized credit officers from 12 to 9, hoping to push productivity up to 140 accounts per person. They plan to bump up this goal once the product is fully automated through the "smart card." Ultimately, BSE would like to expand the client referral system sufficiently to have the supplier pay a finder's fee for new accounts. BSE is therefore targeting more profitable industries, like cosmetics, rather than those with tighter margins, like newspapers.²⁹

CS asset quality is strong at 2.9 percent delinquency in June 1998, recovering from initial repayment problems because of ineffective client screening of BSE's first partner, an agricultural supply corporation. Initially, BSE chose among customers based on their volume of purchase, but that turned out to be an unpredictable metric because of high business seasonality. BSE's internal risk management department now stringently screens the client provided by the suppliers. In addition, **BSE has added another refinement to the underwriting process by more carefully scrutinizing the supplier**. The due diligence on the supplier involves both a market analysis (to determine, for example, its historic market share and the competitiveness of the industry) and a service review to see how the corporation is viewed by its customers. BSE will actually seek out potential customers of the CS to ask them about the quality of product and service of a given supplier. As one loan officer explained, "If the supplier is not responsive to its direct customers that gives us an indication what type of partnership it will be."

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²⁹ The elasticity of demand—consumers' sensitivity to changes in prices—is much greater for newspapers than it is for cosmetics: Women will buy makeup even when money is tight.

CASE STUDY II: CAJAS MUNICIPALES DE AHORROS Y CREDITO-AREQUIPA

INSTITUTIONAL BACKGROUND

Cajas Municipales de Ahorros y Crédito-Arequipa (CMA) opened its doors on March 10, 1986, with the assistance of the German government, which was helping Peruvian municipalities correct their initial unsuccessful models.³⁰ CMA is part of a network of 12 municipal savings and loans banks located in cities and provincial towns throughout Peru that employ a similar lending strategy. The lending methodology and subsequent product development were defined by Interdisciplinaire Projekt Consult (IPC), a German consulting firm with expertise in development finance.³¹ Like all the Cajas across Peru, CMA is charged by law with providing financial services in a sustainable way to people and enterprises that lack access to conventional financial intermediaries.³² Its mission is:

- Decentralization of the financial system, stemming the flow of resources from rural to urban areas: and
- Democratization of credit, by targeting predominantly low-income populations without this access, with priority placed on microenterprise.

CMA is a formal financial intermediary that is regulated by a dedicated department of the Peruvian Superintendent and subject to the National Banking Law. This law stipulates that the board be composed of representatives from the municipality (excluding local government employees), the church, the chamber of commerce, the small business community, and regulatory bodies. The pluralistic board is guided by management principles that govern each Caja:

- Provide **target-group oriented** financial services;
- Make effective use of financial technologies to increase operational efficiency; and
- Pursue full-cost recovery and preservation of capital base.

CMA has adhered to these competitive principles following a conservative growth process marked by continual methodological refinement. CMA was launched in 1986 with two products: crédito prendario (pawn loans) and savings. For the subsequent five years, CMA's product line remained unchanged—a conservative approach driven by a combination of IPC methodology, tight government regulation, and macroeconomic instability.³³ Yet the goal of

 $^{^{30}}$ The initial Cajas Municipales de Ahorros y Crédito, tested out in Puija and Trujillo, were founded in 1982 based on a thesis study by a Peruvian student familiar with the similar institutional forms that had been operating in Germany and Spain.

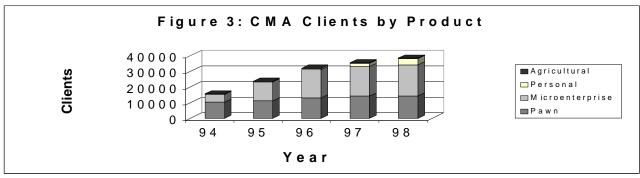
³¹ IPC has a defined microfinance methodology based on individual (versus group-based) loans that it has applied successfully in Latin American countries and globally.

The law stipulates that all Cajas must maintain the value of their equity capital in real terms.

³³ The radical guerrilla group Sendero Luminoso (Shining Path) was active during the late 1980s, during which time Peru fell into a period of hyper-inflation.

improving profitability to increase lending capacity led CMA to improve service delivery and expand its product offering.

In the 1990s, the political and economic stabilization of the country, coupled with the liberalization of banking laws, spawned a new era of growth and product development for CMA. In 1990, the Banking Law was amended (Decreto Supremo 157-90-EF) to ease restrictions that were hindering growth. One important change was to allow "non-consumption" loans oriented toward the micro and small enterprise sector. As a result, CMA launched its business lending targeted at the microenterprise sector. CMA identified the microenterprise segment as a growth sector in the late 1980s, when the growing presence of loan sharks prompted the organization to undertake a feasibility study. Microenterprise lending subsequently became a priority target for CMA.



Source: CMA company documents

The 1990 law also provided CMA with the flexibility and resources to promote expansion. First, the law loosened restrictions on opening new branches in surrounding areas. In addition, the 1990 law created the Fondo Peruano CMAC (or FOCMAC)—a National Fund to channel capital from external markets to the Cajas as a supplement to deposits mobilized locally. To ensure continued prudence, this amendment stipulated that each Caja was required to maintain the value of its equity base in real terms, a consequence of the hyperinflation sparked by the political crisis (see Table 5). CMAC required additional flexibility to take on calculated risk required to generate such equity-preserving returns. Accordingly, additional amendments were passed in 1992 that permitted the offering of deposit instruments denominated in foreign currency and personal credit for consumption. CMA launched its microenterprise and personal loan products respectively after each liberalization.

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Table 5: CMA Preservation of Capital Base

	Net Capital Base		Real Growth in	Inflation
Year	Soles	\$US	Capital Base	Rate (%)
1990	130,730	107,225.01	76.4%	7469.7
1991	339,360	342,787.88	8.5%	139.2
1992	543,160	319,505.88	2.14%	56.7
1993	704,000	322,935.78	32.34%	39.5
1994	1,309,060	597,744.29	33.26%	15.4
1995	2,414,000	1,027,234.04	59.85%	10.7
1996	4,873,000	1,852,851.71	82.47%	11.8
1997	7,805,000	2,838,181.82	43.20%	6.5

Sources: CMAC annual reports; Banco Central de Reserva del Perú

At the same time, the operations of CMA were formalized as part of a new marketing effort. CMA renovated its offices and upgraded the capacity of its systems. In 1993, CMA received its first infusion of external loan funds from the Inter-American Development Bank.³⁴ Since 1994, the Superintendency upgraded the risk classification of CMA to category "B," which signifies a more advanced level of solvency, delinquency management, capital adequacy, and administrative efficiency. At the end of 1996, the Banking Law was amended, calling for the privatization of all Cajas.

MARKET SEGMENTATION

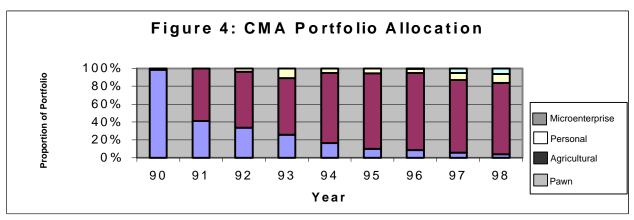
CMA is legally chartered to serve those people and enterprises in Peru without access to conventional financial services; it covers a range of income levels and types of activities. Like BSE, CMA offers loans that serve a mix of consumption and business needs. Table 6 provides an overview of CMA's product line by corresponding target segment.

Table 6: CMA Products by Target Segment

Product (date launched)	Target Market	Loan Purpose
Pawn Loan (1986)	Low and moderate income households	Liquidity emergencies
Small and Micro Business	Micro and small enterprises without access to	Working capital and fixed
Loan (1990)	conventional credit	asset investments
Personal Loan (1992)	Low and moderate income salaried workers	Consumption
Parallel Loan (1995)	Existing small/micro business borrowers	Peak sales campaigns
Agricultural Loan (1996)	Small rural farmers	Working capital and
,		equipment purchases

³⁴ The subsidized loan CMA received charges an average rate of 2 percent per annum. During the previous decade, the Cajas were capitalized in part by an \$8 million grant from Deutsche Gesellachft fur Technische Zusanmenarbeit (GTZ), the German Agency for Technical Co-operation.

Yet since the early 1990s, CMA, like BSE, has identified the microenterprise market as its priority target and has allocated its portfolio accordingly, as depicted in Figure 4. CMA describes its principal target market as low-income "household enterprises" because of an informal microentrepreneur's tendency to mix personal and business income and expenses. Focusing more on sustainability than on growth, these low-income microentrepreneurs typically earn less than US\$100 per month and have working capital totaling between US\$300 and US\$500, with scant fixed assets. They depend on moneylenders and friends for capital. In addition to this principal target market, CMA has gone upmarket to serve the salaried consumer through its *crédito personal* (personal loan), a lucrative product that helps cross-subsidize its lower end business loans.³⁵ Finally, CMA has expanded laterally as well as vertically, incorporating growth-oriented business (through its parallel loan product) and rural enterprises (through its agricultural loan product) into its microenterprise loan portfolio.



Source: CMA company documents

CMA's product development has marked by in-depth feasibility studies, methodical testing, and phased rollout of new products. This modular approach is driven by the IPC methodology and by the risk classification system imposed by the Superintendency of Banks. The IPC-prescribed growth pattern is systematic and sequential, whereby a Caja initiates operations with well-tested, high-margin pawn loans to establish the financial base of the microfinance institution and then expands into riskier, growth-oriented, and more profitable segments. This conservative approach initially prevented CMA from deeply penetrating into the local markets. But the dynamic market environment of Peru's second- largest city and strong performance prompted CMA to develop new product offerings.

CMA has emphasized the microenterprise market since 1993, two years after its first microproduct launch. Micro and small enterprises are the highest growth segments of Arequipa, Peru's second-largest city after the capital, Lima, and an important trading center for the region. This commerce sector has long been a target of CMA, which has located two of its five branches in local markets. Indeed, about 63 percent of CMA's clientele are engaged in commerce, with the remaining borrowers coming from the manufacturing (including the

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³⁵ Lepp, p. 21. This low-cost, low-risk loan involves direct debits from the paychecks of salaried, low-income individuals.

production of consumer goods) and service sectors.³⁶ These sectors include made-to-order production, such as cabinet making and knitting. The proportion of clients engaged in commerce has been slowly but steadily decreasing over time, with a corresponding increase in production and services.

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This case study provides an in-depth look at a few products that were developed from this systematized product evolution, beginning with CMA's first loan offering, *crédito prendario* (pawn loans) and continuing with its *crédito paralelo* (parallel loans targeted at preferential customers) and *préstamo agropecuario* (agricultural loans). A summary of these three products is provided in Table 7. The table also includes CMA's traditional (pawn loans) microlending product and personal loans as points of reference.³⁷

CRÉDITO PRENDARIO

CMA's *crédito prendario*, or pawn loan, is a type of consumer credit targeted at household enterprises with emergency credit needs or periodic cash crunches. Just like BSE's *olla de oro*, *crédito prendario* is guaranteed by gold items that are pledged as collateral. These loans are for small amounts and short term.

Preconditions for New Product Development

Institutional Capacity

CMA was launched with *crédito prendario* as the institution's only revenue—generating product. It followed a proscribed methodology that included specific capacity considerations. All the Cajas were built with the appropriate infrastructure to support pawn loans, which were a good complement to CMA's only other product—savings facilities. Both have similar security requirements, including the installation of locked boxes and armed guards at all branches. A specialized *tasador* (jeweler) was hired as part of the original staff to verify the quality and characteristics of the metal in order to determine an appropriate valuation of the collateral.

Market Conditions

The market analysis IPC initially undertook in Arequipa presented an attractive environment for the standard Caja product—pawn loans. First, a high proportion of low-income Peruvians households own gold and silver, averaging over 40 percent in urban areas like Arequipa. In

³⁶ In June 1998, microenterprises from these two sectors made up 25 percent and 12 percent of CMA's borrowers, respectively.

³⁷ Like the *crédito prendario* (pawn loan), the personal loan is a type of consumer credit, although targeted at the salaried portion of the low-income market segment. The individual microenterprise product would be the best point of reference for CMA's parallel and agricultural loan products.

Table 7: CMA Microfinance Product Summary

Product Characteristics	Crédito Prendario Pawn Loans	Crédito Personal Personal Loans	Crédito de Peq Empr Microenterprise Loans	Crédito Paralelo Parallel Loans	Préstamo Agropecuario Agricultural Loans
Target Market	Low-income household enterprises	Salaried portion of employed active population without access to credit; mostly consumers	Microenterprise with less than 6 months of operating history	Customer relationship of greater than 6 months and 2 payments into an existing loan	Established microenterprise (greater than 1 year of operating history) with guarantee
Eligible Uses	Unrestricted, but designed as emergency credit	Consumption	Working capital; fixed asset investment	Working capital for dedicated campaign (holiday, etc.)	Working capital; fixed asset investment (including farm equipment and agricultural inputs)
Loan Size ^a	50% x grams x market value—only in soles	Available in both soles and \$US	Available in both soles and \$US	Available in both soles and \$US	Available only in soles
—Minimum	2 grams of 14 carat gold (approx. \$15 to \$20)	500 soles (\$170) or \$2,000 in for currency	800 soles (\$275) or \$2,000 in foreign currency	500 soles (\$170)— unofficial	2,000 soles (\$700)
—Maximum: 5% of bank capital base or:	50% of market worth	\$5,000 or 1/3 of monthly salary	100% of borrower capital or 50% of equity if secured	Up to 35% of previously approved loan amount	50% of property value
—Average (6/98)	\$88	\$542	\$875	\$375	\$4,033
Repayment Terms	15, 30, or 60 days with maximum 6 renewals or 360 days	120 to 360 days	Working capital < 12 months; fixed assets < 48 months	30, 45, 60, or 90 days	1 to 48 months
	One-time payment at end of term: full or just interest, if renewal	Equal payments every 15 or 30 days	Equal payments every 7, 15, or 30 days; interest- only grace periods permitted	Same as microenterprise	Based on harvest cycle (usually initial, interest-only grace period with balloon payment at end)
Guarantees	Gold or silver	Salaries or employer, if wages not debited; savings held in CMA	Personal guarantees; household and business collateral	Guarantee from existing loan must cover 100% of both outstanding balances	< \$1,500: co-signer and household assets > \$1,500: vehicle, farm equipment; property
Pricing ^b (Annualized)	60% flat ^c	60% to 70% flat, depending on type of guarantee	Soles: 45.6 to 58.8% ^d \$ denominated: 21.6 to 30% ⁵		

a Note: Dollar equivalents based on July 1996 exchange rate of \$1 = 2.9 soles, unless credit policies indicate equivalent US\$ amount b Interest rates do *not* fluctuate, but loan officers have the flexibility to negotiate rates with clients.

c Interest on pawn loans paid in advance and deducted directly from initial disbursement.

d <7K soles (\$2,400) = 4.9%; 7-12K soles = 4.3%; >12K Soles (\$4K) = 3.8%

e <\$5K = 2.5%; \$5-10K = 2.0%; >\$10K = 1.8%

addition, when CMA opened its doors, it faced little formal competition and enjoyed an uncontested market. The conventional banks did not want to bother with such small loan amounts, as they viewed small-scale lending as only marginally profitable. Furthermore, they wanted to distance themselves from the illicit association with pawnshops and other forms of informal moneylenders. The interest rate CMA charges is lower than that of local pawnshops, and CMA is not as quick as banks to sell in the face of delinquency.³⁸ Today, a serious competitive threat is coming from the banks, which are attracted by the consistent volume generated by the pawn loan product.

Macro-Environment

Legal and political conditions helped shape this product. CMA was born into an environment of great political and economic instability caused by the economic policies of President Alan Garcia and the terrorism undertaken by Sendero Luminoso (Shining Path). CMA was particularly vulnerable because the Shining Path had concentrated its terrorism in the Andean regions of the country, where the greatest concentration of indigenous people lived, and in urban areas, where it could garner the most visibility. A product secured by a relatively stable commodity with an internally established market value was attractive from the viewpoints of both the borrower and the lender. Many Peruvians held their savings in gold during the hyperinflation that ensued in the late 1980s. In addition, the macroeconomic instability generated much of the emergency household demand *crédito prendario* was designed to address.

Legally, CMA is bound by the Civil Code of Peru, which protects certain consumer rights, and by decrees put forth by the legislature and the Superintendency of Banks designed specifically for pawn loans. Most of the legal considerations deal with the contract—in particular, procedures in the event of default. By law, Cajas must wait until a loan is at least 30 days delinquent before selling the collateral and must notify the client in the interim. Then it must give public notice (typically through a newspaper or published report) of the impending sale, which must be an open auction. CMA is forbidden by law to provide the delinquent client with the name or address of the winning bidder.

Product Analysis: Characteristics and Delivery

Target Market and Delivery

CMA designed its *crédito prendario* for a higher-income client—much like BSE did initially with its pawn loan—though with slightly higher risk. CMA's *crédito prendario* is targeted at low-income households that face liquidity squeezes or need emergency financing. Typical

³⁸ Although both the pawn shop and CMA are allowed by law to auction jewelry after 30 days of delinquency, it is more cost effective for CMA to choose a particular day each month to auction its accumulated collateral, allowing the delinquent debtor more time to repay.

uses of the credit have been to pay for unexpected health needs or housing repairs resulting from natural disasters.

The only requirements for a loan is a country identification card and gold to use as security. Customers come into the branch with their jewelry and receive cash the same day, in a process that takes about 15 minutes. In a procedure similar to that of BSE, the borrower's primary interaction is with the jeweler, who weighs and values the gold in front of the client. Once the appraisal is complete, the jeweler labels and puts away the gold while the client signs the loan contract. The client takes the signed contract to the teller for an immediate cash disbursement.

Initially, these loans were considered higher risk because they were designed to provide financing during peak borrowing periods for customers of limited means. Over time, CMA has moved upmarket to serve a slightly higher income clientele³⁹ with a more diverse set of needs, including education as well as nonessential purchases.⁴⁰ Interestingly, the average loan size has remained consistently below US\$90 for five years, demonstrating more about the *product* than the *customer* served.

Advertising started through posters and word of mouth, and now includes print ads that emphasize the safekeeping provided. For the duration of the loan, the jewelry is kept in a vault in the savings bank, in contrast with the less secure storage offered by traditional pawn shops.

Terms and Pricing

Like BSE, CMA has different valuations based on the quality of the gold, using a formula illustrated in the adjacent table. The minimum loan amount is defined by the price of one gram of 18-carat gold (about US\$10), and the maximum is 5 percent of CMA's current capital base per bank regulations. Loan terms can be for 14, 30, or 60 days with the possibility of up to six renewals

\$/Gram	Carat
\$6.00	24
\$5.00	18
\$3.00	14
\$3.50	12

or one year. Unlike BSE, which allows unlimited renewals, CMA caps its effective terms because it views the loan primarily for credit emergencies, not for general consumption. CMA charges an annualized flat rate of 55 to 60 percent, depending on market rates of interest and the length of the loan (with shorter terms having slightly higher rates to make up for the lost revenue). Because CMA, like BSE, also charges interest up-front, the effective, non-inflation adjusted rate of interest is high—over 100 percent. Nonetheless, the rate is still competitive with local pawnshops and very transparent, and the service is efficient. In addition, CMA initially set its rate when *crédito prendario* was the only source of revenue and when competition was minimal.

³⁹ Like BSE, CMA collects no information on the income of its *crédito prendario* clients.

⁴⁰ CMA felt there was a floor on how much further down-market it could penetrate, given the limited number of low-income people who own jewelry, although its *crédito prendario* borrowers still represent a wide range of incomes.

Risk Management

In spite of the stable collateral, CMA considers its target market for its *crédito prendario* as high risk and therefore priced it higher than any of the other loan products. In addition, like BSE, the interest is paid in full up-front, deducted directly from the loan proceeds disbursed. In an effort to preserve the value of its capital base, CMA no longer accepts gold less than 12 carats or silver because of their relatively low value. Like BSE, CMA charges a delinquency penalty based on the number of days past due. CMA's penalty is higher than that of BSE, 0.2 percent daily and the equivalent of 72 percent per annum or a 20 percent mark-up above the regular rate of interest.

The collateral becomes property of the bank after 30 days delinquency. CMA sets aside the third Saturday of every month to auction off the accumulated jewelry to recover its outstanding principal. The one-time sale is to minimize the costs involved in recovering the lost loan payments. In setting the baseline price, CMA adds in the value of the administrative costs (including custodial, valuation, and taxes) and unpaid interest to the gross value in grams of the gold, to recover any potential losses.

Results and Refinements

These risk controls have paid off, as CMA had an accumulative write-off of 2 percent for its *crédito prendario* portfolio, including principal recoveries through auctions. This figure is more impressive considering that, at any given time, close to 40 percent of CMA's *crédito prendario* loans will be at least one day in delinquency. In fact, *crédito prendario* was the most delinquent part of CMA's portfolio before microenterprise lending grew into CMA's priority target. Typically, from 3 to 7 percent of the institution's portfolio will be over 30 days delinquent, although some loans will be recovered before sale as clients respond to the public notice.

CMA has been able to improve the efficiency with which it delivers its pawn loans, as productivity (in terms of clients/loan officer) ranges from 8 to 10 times that of the microenterprise loan officer. CMA's reduction of product choices to focus on only the more-lucrative options also has assisted in efficiency gains. Finally, CMA narrowed the ban of possible terms, eliminating both extremes—one week and 90 days—because of limited demand.

Streamlining has resulted in net profitability margins of nearly 12 percent for the pawn loan product. Its high price generates financial margins of close to 18 percent, but the administrative costs involved in the monthly auction eat away at the profits. Still, *crédito prendario* is second in terms of return on loan capital only to CMA's personal loan, which is relatively easy to administer and has a lower default rate because the personal loan is backed by liquid collateral.

Part of this return has been fueled by *crédito prendario*'s tremendous growth over the last five years. The compounded annual growth rate of its portfolio between 1990-1998 is over

50 percent, a tribute to the popularity of this easily accessible product. Nonetheless, *crédito prendario* represents an ever-shrinking proportion of CMA's portfolio in dollar terms. Part of this decrease is attributable to a redistribution of resources as CMA puts priority on the microenterprise loan market. This has a much higher average loan size than *crédito prendario*, which has remained under US\$90 for the last five years. In addition, CMA is reaching market saturation for *crédito prendario* because demand is limited to the number of people who have gold jewelry and unmet credit needs. Moreover, because its average loan size has stayed steady in the face of an increasing expansion of the microenterprise loan portfolio, its overall share of the portfolio will continue to shrink.

CRÉDITO PARALELO

CMA designed its parallel loan product (crédito paralelo) as an incentive for good clients to take on additional, short-term credit during peak sales seasons. These high-productivity times typically coincide with holiday campaigns and are appropriate for industries with seasonal sales patterns. CMA designed *crédito paralelo* to serve preferential clients by providing the flexibility of a line of credit within a term loan structure.

Preconditions for New Product Development

Institutional Capacity

Internal organizational issues, rather than market forces, initially prompted the development of the parallel loan. CMA's performance-based compensation system provided incentives to loan officers based on the number of new loans booked, as well as the quality and growth rate of their portfolios. This incentive system disproportionately awarded senior loan officers, whose seasoned clientele provided a relatively easy source of loan renewals with low delinquency. To help give newer loan officers access to these preferential clients, IPC and other outside consultants working with CMA developed the parallel loan product. Parallel loans would be booked by dedicated loan officers, forcing senior staff to be more proactive in bringing in new clients to earn their compensation bonuses. Although the incentive issues defined the structure of the new product, the parallel loan was rooted in the demand by existing borrowers for supplemental sources of credit to take advantage of short-term sales peaks.⁴¹

The key institutional capacity elements required for successful implementation of the parallel credit include prudent loan officers who can manage multiple loans and a robust management information system that produces the information required to identify high-quality borrowers. CMA manages its risk through precise benchmarks (minimum requirements) that qualify certain borrowers as preferential, based on their repayment records. CMA has been able to

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⁴¹ Since 1996, CMA has modified its incentive scheme to provide bonuses based on the number of new clients rather than additional loans booked.

use a system set up to manage term loans—with pre-defined repayment periods, no matter how flexibly defined—like a revolving line of credit. Having a reliable management information system is critical to manage this risk, as are seasoned loan officers who can make prudent judgments about when to make exceptions. The definition of a "preferential" client has evolved since CMA first launched its product, reflecting the loan officers' deeper understanding of client character and ability to pay.

Market Conditions

CMA developed this product as a complement to its microenterprise product in response to client need and technical support from outside consultants. Nearly all of its clients experienced seasonality in their sales, especially around festivals and holidays. When CMA was unable to offer multiple credits because of restrictive credit policies, its clients would supplement a CMA microenterprise loan with credit from informal moneylenders. CMA, with the assistance of technical consultants, realized it was missing a profitable opportunity because many of its clients' peak sales periods corresponded to the seasonal characteristics of their industries, necessitating additional capital. In 1995, two years into its internal campaign to prioritize the rapidly growing microenterprise segment, CMA launched its pilot *crédito paralelo* product in hopes of better serving this sector and capturing some of the profits from their sales campaigns.

Macro-Environment

CMA waited until Peru's economy had stabilized before launching its parallel loan product in 1995. The previous five years had been marked by hyperinflation and terrorism, forcing CMA to pursue conservative, higher margin loans such as its personal loan product. President Fujimori's macroeconomic stabilization and counter-terrorism policies brought inflation down to 10.3 percent in 1995, the lowest in the country for the previous 23 years. CMA sought this stability before undertaking the risk of the increased client debt burden from multiple credits.

Because it is still a term loan backed by similar guarantees, *crédito paralelo* is held on the books and provisioned for like any other microenterprise credit. Although CMA treats *crédito paralelo* as a separate credit, the regulators do not require that the institution track its portfolio because provisioning for all commercial credit is based on number of days delinquent. The only legal aspects involved are with the guarantees, which vary in formality based on the loan amount. For smaller credits (less than US\$5,000), the borrower signs a legally binding promissory note, allowing CMA to seize household assets (such as appliances

⁴² Crédito personal, launched in the last trimester of 1992, is secured at least one-for-one by a borrower's salary, savings, or government pension/unemployment account and is currently CMA's most profitable product, even though it is not a credit targeted at microenterprises.

The risk classification and corresponding provisioning are as follows: normal (0 percent); potential problem (1 percent); deficient (25 percent); doubtful (50 percent); lost (100 percent). *Crédito paralelo* consistently has a lower delinquency rate than the rest of the microcredit portfolio.

or vehicles). A salaried co-signer is another effective form of security used because the law gives CMA recourse to dock wages of the guarantor in the event of default. For credits more than US\$5,000, CMA requires a guarantee of property or tangible assets that can be registered publicly.

Product Analysis: Characteristics and Delivery

Target Market and Delivery

The target market for *crédito paralelo* are CMA's preferential clients with fluctuating cash needs. This target segment includes growth-oriented microenterprises working in industries characterized by high seasonality and quick operating cycles. The seasonality is defined by campaign-driven sales peaks (during holidays or festivals) and by product-specific demand fluctuations (such as sweaters in winter). The *crédito paralelo* is designed specifically for the purchase of supplies or raw materials in preparation for the peak sales period, complementing permanent working capital loans used to finance regular operating cycles.

A review of the client files indicates that the typical borrower has total assets valued at an average of 11,000 soles (US\$4,000) and monthly net income of 500 soles (US\$175). Typically, these peak sales periods will represent over half of all annual revenue. Therefore, unlike the underwriting of the microenterprise loan, CMA factors in the sales revenue that will be generated by the parallel loan in determining the borrower's capacity to pay.

Terms and Pricing

A borrower in good standing can take out a *crédito paralelo* for up to 35 percent of the existing loan. *Crédito paralelo* is priced at the same interest rate as the personal loan, and backed by the same guarantee, if its value is sufficient coverage for both loans. Borrowers can take out a *crédito paralelo* denominated in dollars or soles, although the former carries a lower interest rate, as indicated in Table 8. In addition, the minimum amount for a solesdenominated loan is lower than one based in dollars, typically reflecting the nature of the materials being purchased, because vendors trading in dollars usually demand minimum bulk purchases.

Table 8: Monthly Interest Rates for Crédito Paralelo (as of June 1998)

Loan Size (soles)	Int. Rate	Loan Size (\$)	Int. Rate
< 7,000 (= \$2,400)	4.9%	< \$5,000	2.5%
7,000 – 12,000	4.3%	5,000-10,000	2.0%
> 12,000 (=\$4,000)	3.8%	> \$10,000	1.8%
Daily delinquency			
interest penalty:	0.19%		0.09%

Source: CMA company documents

Crédito paralelo is a short-term loan intended for specific sales events. Borrowers can choose a term of 30, 45, 60, or 90 days and the repayment frequency, which can include an interest-only grace period subject to credit committee approval. Borrowers in good standing, measured cumulatively as no more than seven days of overdue payments, can renew the parallel loan once the balance is paid off in full, including any delinquency penalties.

Risk Management

Only those clients with a demonstrated history of repayment of at least six months meeting specific performance benchmarks are eligible for *crédito paralelo*. Borrowers on their most-recent loan must have averaged a delinquency rate of 2.5 days or fewer over all the payments, with no more than eight days late on any given payment. Repeat borrowers must have cumulatively no more than seven days late on the last *crédito paralelo*. Any client with a previous loan that had been restructured or written off is ineligible for *crédito paralelo*. ⁴⁴

CMA manages its exposure to multiple credits by limiting the amount to no more than 35 percent of the previously approved loan, which was calculated based on debt capacity. Still, the additional credit must be fully covered by the existing guarantee, or the borrower must pledge additional security. Nonregistered assets to secure loans of less than US\$5,000 have proven to be an effective risk management tool. Even though their market value typically does not fully cover the CMA's claims on the borrower, this collateral is typically of great value to the client in terms of replacement costs and thus is an effective lever for repayment. For loans over US\$5,000, CMA requires real guarantees that are formally registered with the local municipality.

Results and Refinements

The *crédito paralelo* is a popular product among CMA's preferential clients because it acts like a line of credit. Its delinquency is not tracked separately from the microenterprise loan, although calculations indicate that delinquency hovers below 4 percent and is less than the delinquency rate of the overall microcredit loan portfolio. It is difficult to disaggregate its costs because a good part of due diligence takes place as part of underwriting the initial microenterprise credit. Nonetheless, the loan officers view the product as an effective marketing technique to attract well-performing, growth-oriented microenterprises while providing incentives for on-time repayment. In addition, this flexible credit assists in client retention.

CMA has loosened its eligibility requirements in terms of repayment. Previously, a client had to average two days' delinquency (versus 2.5) over the last series of repayments and could have no more than five (versus seven) cumulative days past due on a previous parallel loan. Introducing additional flexibility into this product has allowed *crédito paralelo* to function as a revolving line of credit facility for ongoing working capital needs, although risk issues have

⁴⁴ CMA will "restructure" a loan by extending terms or offering a temporary grace period in extenuating circumstances, but it will not book it as a new loan.

arisen with borrowers stretching the terms of traditional loan agreement. Nonetheless, the *crédito paralelo* has been so successful that CMA is designing a pilot true credit line to offer its preferential customers with fluctuating liquidity needs.

PRÉSTAMO AGROPECUARIO

Préstamo agropecuario is an agricultural loan product designed for small farm owners who live in the rural areas around Arequipa. Like the *crédito paralelo*, *préstamo agropecuario*'s terms are specifically tailored to the seasonal needs of its target market, including interest-only grace periods and balloon end-payments tied to the harvest cycle. *Préstamo agropecuario* is CMA's newest product development.

Preconditions for New Product Development

Institutional Capacity

CMA hired a loan officer with expertise in agriculture as a critical part of the loan underwriting. This person is dedicated exclusively to *préstamo agropecuario* because of the specialized nature of the loan product. The variability of the climate-dependent market is entirely different from the relatively predictable conditions a commercial microenterprise faces. Specialized expertise is required to understand how to value the agricultural assets appropriately and to predict risk prudently. With such irregular repayment terms (that is, interest only with balloon end-payments), initial analysis of the borrower's sectoral expertise and character is a critical risk management tool. Finally, CMA had an internal systems staff and a sufficiently robust management information system to amortize and track non-standard loans with grace periods and balloon payments.

Market and Macro Conditions

Although Arequipa is Peru's second-largest city, the surrounding rural areas have always been an important part of the local economy. Because the maintenance of a robust agricultural industry was viewed as a national priority, farmers were served by government-backed programs and the national bank, Banco Agro, for many years. The failure in the early 1990s of this national bank and the state-run cooperatives, ⁴⁵ coupled with the elimination of a government-sponsored program (Fondo Agro) designed to provide farmers with credit to purchase inputs for production, cut off the main sources of credit to local farmers. The opening of international markets, resulting from President Fujimori's liberalization policies in the early 1990s, made local farmers even more vulnerable to low commodity prices and increased competition. This perceived industry risk led banks to abandon this sector except

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⁴⁵ The collapse of these institutions resulted from factors that often plague public projects, such as weak enforcement and public perception of "soft" money.

for the most established agro-corporations. Nevertheless, CMA recognized a "micro-climate" industry niche in Arequipa that had little competition and high volume demand among small farmers (that is, those with fewer than 2 hectares of land).

Product Analysis: Characteristics and Delivery

Target Market and Delivery

CMA designed *préstamo agropecuario* to penetrate deeper into the microenterprise market. Most of the agricultural clients targeted with *préstamo agropecuario* are very small farmers who own less than 1.5 hectares of land. ⁴⁶ Even the largest of CMA's clients own only 5 hectares of land. The majority grow vegetables that can thrive in Arequipa's relatively dry climate and can be preserved for the long transport to Lima. These include peppers, onions, and garlic. Dairy farms are also a specific target of CMA's *préstamo agropecuario* product.

Loan officers market this product through direct outreach to potential clients, including visits to the field and to the weekly agricultural markets where these products are traded. This proactive, personal promotions effort was important for CMA to successfully penetrate this new market in a manner that communicated the client-focused nature of its operations. As Willy Escobedo, Director of Credit Programs explained, "The real difference between Cajas and conventional banks is that our loan officers have muddy shoes."

Terms and Pricing

Repayment terms are designed to match the harvesting season of the client's particular agricultural product. Most repayments are structured with extended interest-only grace periods and a balloon payment at maturity that coincides with cultivation. In an effort to maximize the flexibility and attention to borrower's needs (and loan purpose), maturities can range from 30 days (working capital) to four years (equipment purchases).

Préstamo agropecuario is priced according to the loan size, following the same interest rate schedule as the microenterprise loans. One difference is that *préstamo agropecuario's* loan minimum—2,000 soles (US\$700)—is slightly higher than the amount for the microenterprise loan (800 soles or US\$275), reflecting the higher asset base of the target clients, who are property owners. Another difference is that *préstamo agropecuario* is offered only in soles. Loan maximum is 50 percent of property value, subject to the overall maximum of any CMA loan—that is, 5 percent of the institution's equity base. The average loan size for *préstamo agropecuario* in July 1998 was 11,000 soles (US\$4,000).

⁴⁶ 1 hectare = 10,000 square meters = 2.47 square acres. In June 1998, the value of 1 hectare of farm land in the Arequipa region was approximately 30,000 soles, or US\$10,700.

⁴⁷ Presentation at International Seminar, "The Challenge for Latin America in the 21st Century: Financial Services in Rural Areas," La Paz, Bolivia, November 17-19, 1998.

Risk Management

CMA's risk exposure for the *préstamo agropecuario* is highly dependent on the skills and expertise of the loan officers and their ability to accurately appraise the harvesting cycle and property value. Using specialized farm equipment as security introduces the risk that the resale value in the event of default will be lower than the initial appraisal. In addition, because the equipment is movable, it can be hidden when the time comes to redeem the collateral in case of default. At times, CMA asks the borrower to pledge additional assets or insists on a co-signer to provide an alternative recourse in the event of default, based on the same criteria as its commercial microcredit. For loans under US\$1,500, CMA requires a cosigner and domestic assets to serve as collateral. Over US\$1,500, the borrower must present "real" security, including title to a car, farm equipment, or mortgage of property. The staggered, back-end payment structure also exposes CMA to risk in the event of a meager harvest because of poor cultivation or misuse of loan funds. To manage this risk, CMA can disburse préstamo agropecuario in tranches tied to loan use verification, for less-experienced borrowers. In fact, CMA has had to educate its borrowers on liquidity management to counteract the legacy of the subsidy mentality that decades of government programs instilled in many farmers, who had grown dependent on the aid.

Results and Refinements

Préstamo agropecuario has had a remarkably low default rate because of its **long testing period**; **carefully designed terms**; and the expertise of its chief loan officer, who managed a family farm for many years before joining CMA. In the two years *préstamo agropecuario* has been available, there have been no write-offs and CMA has never had to sell any of the collateral put up as guarantee to recover a loan payment. The delinquency rate (over 1 day past due) of *préstamo agropecuario* was 2.65 percent in 1997, its first full year of operation and dropped to 1 percent for the first half of 1998. It has grown from an initial volume of 118,000 soles (US\$45,000) in the last quarter of 1996 to 2.89 million soles (US\$1.05 million) by year-end 1997. It grew by an additional 50 percent (8.4 million soles or US\$2.86 million) in just the first half of 1998.

Less than two years in operation, *préstamo agropecuario* has not yet reached the break-even point. **Delivering a product targeted at the agricultural sectors is a cost-intensive endeavor** because of the low population density of rural areas, the less-developed systems of communication and transportation infrastructure, the personalized nature of the initial marketing outreach, and time-consuming analysis. Nonetheless, CMA anticipates that this product will soon cover its costs because of the higher average loan size, low default rate, and vast untapped demand in this neglected market.

Most of the refinements on the original product implementation plan have involved borrower education. The years of government-subsidized programs and terrorism, which initially was concentrated in the highly indigenously populated rural areas, caused many market distortions. Much of CMA's effort has focused on working with borrowers to understand the true costs and risk of agricultural industries, including contingency planning, in order to design products better suited to their cash-flow needs.

CONCLUSION: KEY FINDINGS

Each product discussed in this report has distinct challenges and characteristics that dictate its contribution to the microfinance institution that designed them. The purpose of the conclusion is not to downplay the uniqueness of the market and environmental factors that shaped their design. Rather, the following comparative analysis attempts to highlight the key institutional features integral to the successful design of the products examined.

CLIENT-TAILORED DESIGN

Both institutions studied used a target-market perspective to design their products. This client-centered approach results in products that meet the needs of their consumers, thereby addressing both the financial and the social objectives of commercially oriented microfinance institutions. Focusing on what is of value to the client influences the operational efficiency and the product design, increasing client satisfaction and retention and, hence, the profitability for the institution. For example, placing a high priority on the expeditious delivery of credit forced both BSE and CMA to streamline their underwriting and to improve productivity in a manner that helped the bottom line while serving clients' needs. Indeed, BSE's loan officer-to-client ratio for its pawn loan is four times higher than that for individual lending.

Taking a client-centered or target-market perspective in product development allows the institution to allocate resources to focus on the components that will generate the most demand and, if done right, profits. This differentiation was evident in the distinctive positioning of CMA and BSE's pawn loan product. Although evidence is not available to determine if the products are actually reaching different client segments within each market, the institutions chose different positioning options, which are reflected in their respective marketing slogans. Differences in currency, valuation, and interest rates may be more dependent on strategic positioning or market factors. This differentiation is further reflected in the marketing pitch each institution takes. CMA's pawn loan brochure has a tag line that reads, "The solution [to the crisis or emergency] is in your hands" with an emphasis later on "credit *immediately*." BSE's brochure also brings up the fast delivery of credit, but BSE's message is directed upmarket: "Your time is gold ... and your gold is worth money." The difference is subtle but distinct.

Interestingly, both institutions used this product as their entry into the micro and small enterprise market. Although the initial purpose was meant for general consumption, both institutions adjusted the design to focus on the ancillary benefits valued by their respective target markets. This client-centered approach allowed both institutions to design products that have been commercially successful and enabled them to expand their reach.

Conclusion: Key Findings

RISK MANAGEMENT

Both BSE and CMA developed new products with a conscious eye toward risk management, a critical element of all credit products that should be incorporated into product development from inception. These risk control measures were present in the general methodological approaches that govern all lending practices and in the specific product design. BSE and CMA mixed elements of traditional microcredit technology (stepped lending) and traditional finance (guarantees) but with a twist. Both employed a stepped lending technique for their products, starting with a small initial exposure to manage risk and adding increased internal controls (usually signing authority) as loan volumes increased. Both balanced internal controls with delegated authority that allows credit officers to be responsive to client needs. As one agency director explained, "The goal is to reduce risk in a decentralized way" in order to control costs. Finally, both viewed portfolio diversification through the development of new products as a risk management technique.

Both institutions integrated loss controls into the product design, especially for riskier products. For example, the pawn loan products of both BSE and CMA deeply discount the loan-to-value ratio to protect against loss of principal. Additional risk management came in the highly standardized nature of the product, evidenced in part by how similar the pawn offerings of the two institutions were, the easy and stable valuation of gold, and up-front payment of interest. In addition, both were able to piggy-back on previous expertise (in the case of BSE, its competitor; and for CMA, on IPC's experience) to design the product and tailor it to local market conditions.

Interestingly, BSE product prices were based more on administrative costs than risk mitigation. For example, BSE's solidarity group loans are the most expensive of its microenterprise portfolio, averaging from 4 to 10 percent higher than its *olla de oro* and other singular credits (*crédito individual, crédito fiduciario*, and *cuenta solidaria*). This price premium helps offset the transaction costs (in terms of business visits, paper work, and the like) involved in underwriting a group credit and the lower average loan size to design a product that can ultimately be self-sustaining.

Both institutions used industry-specific risk controls for their niche products. BSE used the supplier power that resulted from high industry concentration as leverage against delinquent borrowers of its *cuenta solidaria* product, having the corporate partner withholds critical business inputs. In addition, *cuenta solidaria* varied repayment periods, differentiated by industry based on the length of its operating cycle. Similarly, CMA's agricultural loan product was structured to take into account sectoral seasonality. Both were well received and a profit center in each institution. The newness of both products makes it difficult to make conclusive statements about their continued asset quality and potential profitability, but tailoring products to client needs improves client satisfaction and therefore should also support retention. Designing product repayment based on an enterprise's cash flow also reduces the need for the borrower to shift sources and to borrow from one source to pay another.

⁴⁸ Both institutions require two loan officer signatures for first-time loans, a department head signature for repeat loans, and a credit committee signature for loans over a certain size.

PRODUCT VARIETY

Both institutions have a product variety that serves multiple objectives, partly a result of the dual social and financial mission by which each abides. Although these goals are often complementary, both BSE and CMA have pursued a strategy of incorporating consumer and conventional credit products to improve profits and lower risk. There is a risk that this dual mission can cause institutional confusion or misallocation of resources that work at cross-purposes. In addition, in trying to manage multiple goals and serve multiple markets, a microfinance institution can dilute its effectiveness in any of them. Both institutions, however, have demonstrated ways of managing this risk and, furthermore, using this strategy advantageously to serve the microfinance market.

The product variety has assisted each institution in more fully serving the needs of its target microfinance market. Moreover, each institution finds value in a strategy that includes product variety, from cross-selling products to diversifying and growing its client base. Both BSE and CMA designed products targeted at higher income segments and consumption to help subsidize the development of products targeted at their common priority market: microenterprises. 49 Some of these higher segment products, like BSE's crédito fiduciario, are designed additionally to provide a repayment incentive for existing borrowers. One primary benefit of the product is the ability of the client to access additional larger loans at longer, more flexible terms. Loan officers of both programs identify the value of cross-selling different products and providing a "ladder" for their clients. In fact, BSE views its different products as serving complementary levels of the market segment pyramid, allowing it to become a full-service financial intermediary to those who lack access to credit. Similarly, CMA sees itself continuing to expand wider and deeper into the microenterprise market, serving the varying needs of different sectors (including commerce, production, and agriculture) with its product menu. In this way, both institutions are trying to position themselves as a one-stop shop for the needs of microenterprises.

It is interesting to note that product *variety* has become an alternative to the product *ladder* implicit in stepped lending and other methodologies that use increased loan size as an incentive for on-time repayment and client retention. By offering a more diverse mix of products and terms that are tailored to the needs of the client, these institutions have used market-driven product variety as a recipe for success.

CULTURE OF INNOVATION

Both institutions have created a culture of innovation to foster new product development. They have continually reinvented themselves, looking for new ways to improve client service and expand their reach in the microenterprise market. BSE and CMA regularly undertake market research and hold focus groups to uncover opportunities for new products. In fact, BSE is researching the possibility of both a microleasing and a microfactoring product,

Conclusion: Key Findings

⁴⁹ It is important to note that this cross-subsidy is intended as a short-term strategy until the microenterprise products reach a break-even volume.

having discovered demand for these services among its clientele.⁵⁰ Both institutions also have performance-based compensation systems that reward client retention (in addition to portfolio size and delinquency control), which creates incentives to discover new services that will keep customers from deserting.

Innovation is also facilitated by the technological infrastructure that enables the institutions to overcome the costs involved in penetrating more deeply into this target segment. For example, both institutions are installing "smart card" technology whereby customers can carry out transactions electronically at automatic teller machines (ATMs). In BSE's case, the microenterprise will use a debit card to buy its primary materials from the suppliers, rather than the paper voucher now employed. This automation will make the *cuenta solidaria* loan product like a line of credit, whereby the borrower can manage its liquidity more flexibly from ATMs installed throughout the city. CMA also is looking into using ATMs to reintroduce an "automatic" credit product it experimented with to give instantaneous approval for renewals of clients in good standing.

In both institutions, the drive for massive reach and for sustainability is behind the product innovation. The drive comes from a variety of factors, including competition; staff with business and banking expertise; outside, international expertise; and institutional structure. The continual refinement and development of products allow the institutions to increase their impact while pursuing their financial goals. Commercially oriented microfinance institutions are thereby working toward a more seamless link that connects the informal economies they serve to the conventional financial sector shaped them.⁵¹

⁵⁰ Leasing is an alternative method of financing equipment purchases, based on cash flow, use, and security considerations. Factoring is a way of trading account receivables for cash to finance working capital shortages. Interestingly, the microfactoring product is an opportunity created by the prevalence of customers in some industries to pay for products with post-dated checks, which are the "accounts receivables" a factoring product could finance.

⁵¹ For a more lengthy discussion on developing a culture of innovation for new product development, please see MBP's "New Product Development Technical Note 1: Evaluation and Preparation," by Monica Brand.

CONCLUSION: KEY FINDINGS

Each of the products discussed in this report has its distinct challenges and characteristics that dictates its contribution to the MFIs which designed them. The purpose of the conclusion is not to down play the uniqueness of the market and environmental factors that shaped their design. Rather, the following comparative analysis attempts to highlight the key institutional features integral to the successful design of the products examined.

CLIENT-TAILORED DESIGN

Both institutions studied adopted a target-market perspective to design their products. The key value of this client-centered approach is its ability to design products that meet the needs of their consumers, thereby addressing both the financial and social objectives of commercially oriented microfinance institutions. Focusing on what is of value to the client influences both the operational efficiency as well as product design, increasing client satisfaction and retention, and hence profitability for the institutions. For example, placing a high priority on expeditious delivery of credit forced both institutions to streamline their underwriting and improve productivity in a manner that helped the bottom line while serving clients' needs. Indeed, BSE's loan officer/client ratio for its pawn loan is *four times* higher than that of individual lending.

Taking a client-centered or target-market perspective in product development allows the institution to more intelligently allocate resources to focus on the components that will generate the most demand, and if done right, profits. This differentiation was evident in the distinctive positioning of CMA and BSE's pawn loan product. Although evidence is not available to determine if the products are actually reaching different client segments within each market, the institutions chose different positioning options which are reflected in their respective marketing slogans. Differences in currency, valuation, and interest rates may be more dependent on strategic positioning or market factors. This differentiation is further reflected in the marketing pitch each institution takes. CMA's pawn loan brochure has a tag line that read "The solution [to the crisis or emergency] is in your hands" with an emphasis later on "credit *immediately*." BSE's brochure also brings up the fast delivery of credit, but its message is directed upmarket: "Your time is gold... And your gold is worth money." The difference is subtle but distinct.

Interestingly, both institutions used this product as their entry into the small and micro market. Though the initial purpose was meant for general consumption, both institutions adjusted the design to focus on the ancillary benefits valued by their respective target markets. This client-centered approach allowed both institutions to design products that have been commercially successful and enabled them to expand their reach.

Conclusion: Key Findings

RISK MANAGEMENT

Both BSE and CMA developed new products with a conscious eye towards risk management, a critical element of all credit products which should be incorporated into product development from inception. These risk control measures were present both in the general methodological approaches that govern all lending practices and in the specific product design. They mixed elements of traditional icrocredit technology (stepped lending) and traditional finance (guarantees) but with a twist. Both employed a stepped lending technique for their products, starting with a small initial exposure to manage risk and adding increased internal controls (usually signing authority) as loan volumes increased.⁴⁹ Both balanced internal controls with delegated authority that allows credit officers to be responsive to client needs. As one agency director explained, "the goal is to reduce risk in a decentralized way" in order to control costs. Finally, both viewed portfolio diversification through the development of new products as a risk management technique.

Both institutions integrated loss controls into the product design, especially for riskier products. For example, both MFIs' pawn loan products deeply discount the loan to value ratio in order to protect against loss of principal. Additional risk management came in the highly standardized nature of the product, evidenced in part by how similar the pawn offerings of the two institutions were; the easy and stable valuation of gold; and upfront payment of interest. In addition, both were able to piggy-back on previous expertise (in the case of BSE, its competitor and CMA, on IPC's experience) to design the product and tailor it to local market conditions.

Interestingly, BSE product prices were based more on administrative costs than risk mitigation. For example, its solidarity group loans are the most expensive of its micro portfolio, averaging from 4–10 percent higher than its *Olla de Oro* and other singular credits (*crédito individual, crédito fiduciario* and *cuenta solidaria*). This price premium helps offset the transaction costs (in terms of business visits, paper work, etc.) involved in underwriting a group credit and the lower average loan size to design a product that can ultimately be self-sustaining.

Both institutions also used industry-specific risk controls for their niche products. BSE used the supplier power that resulted from high industry concentration as leverage against delinquent borrowers of its Cuenta Solidaria product having the corporate partner withholds critical business inputs. In addition, Cuenta Solidaria varied repayment periods, differentiated by industry based on the length of its operating cycle. Similarly, CMA's agricultural product was structured to take into account sectoral seasonality. Both were well received and a profit center in each institution. The newness of both products makes it difficult to make conclusive statements about their continued asset quality and potential profitability, but tailoring products to client needs improves client satisfaction and therefore should also support retention. Designing product repayment based on an enterprise's cash flow also reduces the need for the borrower to shift sources – and borrow from one source to pay another.

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⁴⁹ Both institutions require two loan officer signatures for first time loans, a department head for repeat loans, and a credit committee for loans over a certain size.

PRODUCT VARIETY

Both institutions have a product variety that serves multiple objectives, partly a result of the dual social and financial mission by which each abides. While these goals are often complementary, both have pursued a strategy of incorporating consumer and conventional credit products to improve profits and lower risk. There is a risk that dual mission can cause institutional confusion or mis-allocation of resources that work at cross-purposes. In addition, in trying to manage multiple goals and serve multiple markets, an MFI can dilute its effectiveness in any of them. Yet both institutions have demonstrated ways of managing this risk and furthermore, using this strategy advantageously to serve the micromarket.

The product variety has assisted each institution in more fully serving the needs of its target micro market. Moreover, each institution finds value in a strategy which includes product variety, from cross-selling products to diversifying and growing its client base. Both BSE and CMA designed products targeted at higher income segments and consumption to help subsidize the development of products targeted at their common priority market: microenterprise.⁵⁰ Some of these higher segment products, like BSE's Crédito Fiduciario, are designed additionally to provide a repayment incentive for existing borrowers. One of the primary benefits of the product is the ability of the client to access additional larger loans at longer, more flexible terms. Loan officers of both programs identify the value of crossselling different products and providing a "ladder" for their clients. In fact, BSE views its different products as serving complementary levels of the market segment pyramid, allowing it to become a full-service financial intermediary to those who lack access to credit. Similarly, CMA sees itself continuing to expand wider and deeper into the microenterprise segment, serving the varying needs of different sectors (including commerce, production, and agriculture) with its product menu. In this way, both institutions are trying to position themselves as a one-stop shop for the needs of a microenterprise.

It is interesting to note that product *variety* has become an alternative to the product *ladder* implicit in stepped lending and other methodologies that use increased loan size as an incentive for on time repayment and client retention. By offering a more diverse mix of products and terms that are better tailored to the needs of the client, these institutions have used market-driven product variety as a recipe for success.

CULTURE OF INNOVATION

The final commonality that both institutions have used to foster new product development is creating a culture of innovation. Both institutions have continually reinvented themselves, looking for new ways to improve client service and expand their reach in the microenterprise market. Both institutions regularly undertake market research and hold focus groups to uncover opportunities for new products. In fact, BSE is researching the possibility of both a microleasing and microfactoring product, having discovered demand for these services

Conclusion: Key Findings

⁵⁰ It is important to note that this cross-subsidy is intended as a short-term strategy until the microenterprise products reach a break-even volume.

among its clientele.⁵¹ Both institutions also have performance-based compensation systems that reward client retention (in addition to portfolio size and delinquency control), which creates incentives to discover new services that will keep customers from deserting.

Innovation is also facilitated by the technological infrastructure that enables the institutions to overcome the costs involved in penetrating more deeply into this target segment. For example, both are in the process of installing "smart card" technology whereby customers can carry out transactions electronically at automatic teller machines (ATMs). In BSE's case, the microenterprise will use a debit card to buy its primary materials from the suppliers, rather than the paper voucher now employed. This automation will make the CS product more like a line of credit whereby the borrower can manage its liquidity more flexibly from ATMs installed throughout the city. CMA also is looking into using ATMs to re-introduce an "automatic" credit product it experimented with to give instantaneous approval for renewals of clients in good standing.

In both institutions, it is the dual drive for massive reach and sustainability that is behind the product innovation. The drive comes from a variety of factors including competition; staff with business and banking expertise; outside, international expertise; and institutional structure. The continual refinement and development of products allows the institutions to increase their impact while pursuing their financial goals. Commercially oriented microfinance institutions are thereby working towards a more seamless link that connects the informal economies which they serve to the conventional financial sector which shaped them.⁵²

⁵¹ Leasing is an alternative method of financing equipment purchases, based on cash flow, use, and security considerations. Factoring is a way of trading account receivables for cash to finance working capital shortages. Interestingly, the microfactoring product is an opportunity created by the prevalence of customers in some industries to pay for products with post-dated checks, which are the "accounts receivables" a factoring product could finance.

⁵² For a more lengthy discussion on developing a culture of innovation for new product development, please see MBP's "New Product Development Technical Note 1: Evaluation and Preparation," by Monica Brand.

ANNEX I LIST OF INTERVIEWS

A sincere thanks to all the management and staff listed below who were so generous with their time and insight.

BANCO SOLIDARIO DE ECUADOR

Santiago Ribadeneira, President and CEO
Monica Hernandez de Phillips, Vice President
Fidel Duran, Vice President, Microenterprise
Cesar Montesinos, Product Manager, Cuenta Solidaria
Francisco Guzman, Assistant Director of Sales
Rodrigo Pelaez, Vice President of Risk
Jimmy Nuñez, Systems Manager
Belen Sanchez, Director of Planning
Soledad Burbano, Administrative Director
Maria Soledad Jarrín, Training Director
Francisco Diaz, Product Manager, Crédito Fiduciario
Patrick Barrera, Lawyer
Eduardo Zurita, Tasador (Jeweler/Loan Officer), Olla de Oro
Francisco Diaz, Branch Manager (Agencia de Recreo)
Byron Balseca, Branch Manager (Agencia de Centro)

CAJAS MUNICIPALES DE AREQUIPA, PERU

Willy Escobedo Zegarra, Senior Manager
Wilber Dongo Diaz, Senior Manager
Adria Cabrera de Polar, Senior Manager
Gabriel Rebaza Manrique, Director, Information Management
Luis Alberto Gallegos Almonte, Apoderado
Gonzalo J. Medina Figueroa, Manager, Operations
Yuver Ramos Rosa, Branch Manager, Agencia La Merced
Roger Arevalo Herreros, Loan Officer, Agencia Mercaderes
Guillermo Nevado Rioja, Branch Manager, Agencia Mercaderes
German Apaza Calla, Branch Manager, Agencia Miraflores
Sandra Paredes Nuñez Melgar, Loan Officer, Agencia Miraflores
Uberiando Rivera, Branch Manager, Agencia San Camilo
Mónica Gomez, Branch Manager, Agencia Pampilla
Antonio Escobar, Branch Manager, Agencia Yanhuara
Yvan Paredes Delgadillo, Loan Officer, Agencia Mercaderes

OTHERS

Astrid Sanchez Falero, Executive Director, Federación Peruana de Cajas Municipales de Ahorro y Crédito (FEPCMAC)

Walter Torres Kong, Director of Technical Assistance, FEPCMAC Cesar Pereya Tello, Analyst, Superintendencia de Banca y Seguros de Perú Guillermo Arrivillaga, Sectoral Specialist, Banco Interamericano de Desarrollo Marco Castillo Torres, General Manager, Corporacion Financiera de Desarrollo

ANNEX II MBP PUBLICATIONS SERIES